PCT/EP2004 / 011364

The Patent Office
Concept House
Cardiff Road
Newport
South Wales
NP10 8QQ

INVESTOR IN PEOPLE

REC'D 02 NOV 2004
PCT
WIPO

PRIORITY DOCUMENT

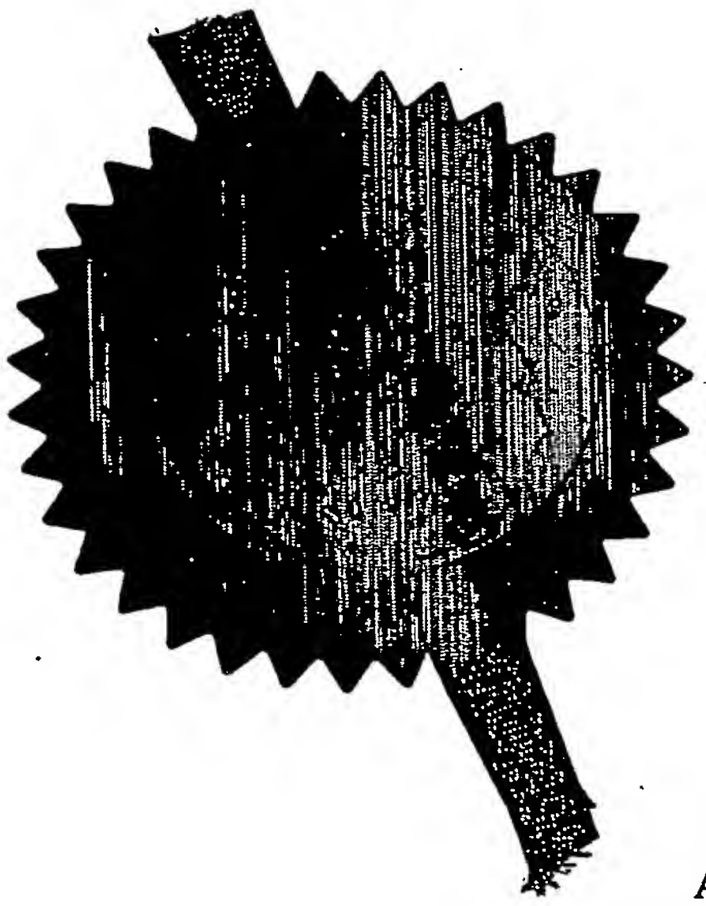
SUBMITTED OR TRANSMITTED IN COMPLIANCE WITH RULE 17.1(a) OR (b)

I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as originally filed in connection with the patent application identified therein.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

In accordance with the rules, the words "public limited company" may be replaced by p.l.c., plc, P.L.C. or PLC.

Re-registration under the Companies Act does not constitute a new legal entity but merely subjects the company to certain additional company law rules.



Signed Andrew Gregg

Dated 10 September 2004

Patents Form 1/77

Patents Act 1977
(Rule 16)

The Patent Office

1/77

Request for grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

The Patent Office
Cardiff Road
Newport
Gwent NP9 1RH

1. Your reference — KR/JW/PB60530

2. Patent application number
(The Patent Office will fill in his part) — 0323581.9

3. Full name, address and postcode of the or of each applicant *(underline all surnames)*

Patents ADP number *(if you know it)*

If the applicant is a corporate body, give the country/state of its incorporation

Glaxo Group Limited
Glaxo Wellcome House, Berkeley Avenue,
Greenford, Middlesex UB6 0NN, Great Britain

47358 7003

United Kingdom

4. Title of the invention — Novel Compounds

5. Name of your agent *(if you have one)*

"Address for service" in the United Kingdom to which all correspondence should be sent
(including the postcode)

Patents ADP number *(if you know it)*

Corporate Intellectual Property

GlaxoSmithKline
Corporate Intellectual Property (CN9 25.1)
980 Great West Road
BRENTFORD
Middlesex TW8 9GS

8072555006

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or each of these earlier applications and *(if you know it)* the or each application number

Country	Priority application number *(if you know it)*	Date of filing *(day / month / year)*

7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application

Number of earlier application	Date of filing *(day / month / year)*
	/ /

8. Is a statement of inventorship and of right to grant of a patent required in support of this request? *(Answer yes if:*

a) any applicant named in part 3 is not an inventor, or
b) there is an inventor who is named as an applicant, or
c) any named applicant is a corporate body

See note (d)

Patents Form 1/77

Enter the number of sheets for any of the following items you are filing with this form. Do not count copies of the same document

Continuation sheets of this form	
Description	178
Claim(s)	2
Abstract	
Drawings	

10. If you are also filing any of the following, state how many against each item.

Priority Documents	
Translations of priority documents	
Statement of inventorship and right to grant of a patent *(Patents Form 7/77)*	
Request for preliminary examination and search *(Patents Form 9/77)*	
Request for substantive examination *(Patents Form 10/77)*	
Any other documents *(please specify)*	

11. We request the grant of a patent on the basis of this application
Signature K Rutter Date 8-Oct-03

12. Name and daytime telephone number of person to contact in the United Kingdom: K Rutter 01279 644396

Warning

After an application for a Patent has beeen filed, the Comptroller of the Patent Office will consider whether publication or communication of the invention should be prohibited or restricted under Section 22 of the Patents Act 1977. You will be informed tf it is necessary to prohibit or restrict your invention in this way. Furthermore, if you live in the United Kingdom, Section 23 of the Patents Act 1977 stops you from applying for a patent abroad without first getting written permission unless an application has been filed at least six weeks beforehand in the United Kingdom for a patent for the same invention and either no direction prohibiting publication or communication has been given, or any such direction has been revoked.

Notes

a) If you need help to fill in this form or you have any questions, please contact the Patent Office on 0645 500505
b) Write your answers in capital letters using black ink or you may type them.
c) If there is not enough space for all relevant details on any part of this form, please continue on a separate sheet of paper and write "see continuation sheet" in the relevant part(s). Any continuation sheet should be attached to this form.
d) If you have answered 'Yes' Patents Form 7/77 will need to be filed.
f) For details of the fee and ways to pay please contact the Patent Office.

COMPOUNDS

This invention relates to cyclopentene compounds, to processes for their preparation, to pharmaceutical compositions containing them and to their use in medicine, in particular their use in the treatment of conditions mediated by the action of PGE_2 at EP_1 receptors..

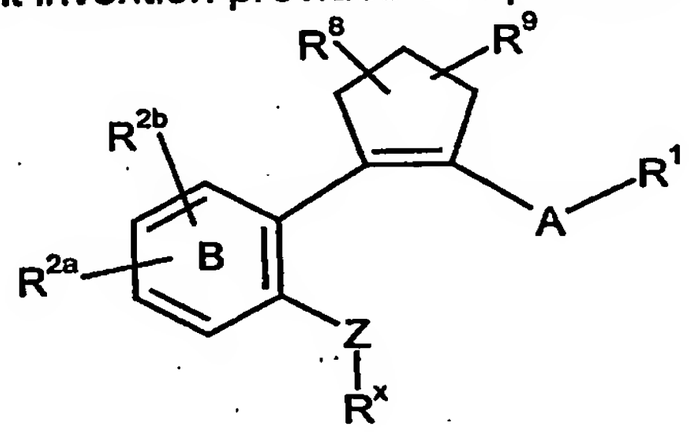
The EP_1 receptor is a 7-transmembrane receptor and its natural ligand is the prostaglandin PGE_2. PGE_2 also has affinity for the other EP receptors (types EP_2, EP_3 and EP_4). The EP_1 receptor is associated with smooth muscle contraction, pain (in particular inflammatory, neuropathic and visceral), inflammation, allergic activities, renal regulation and gastric or enteric mucus secretion. We have now found a novel group of compounds which bind with high affinity to the EP_1 receptor.

A number of review articles describe the characterization and therapeutic relevance of the prostanoid receptors as well as the most commonly used selective agonists and antagonists: *Eicosanoids; From Biotechnology to Therapeutic Applications,* Folco, Samuelsson, Maclouf, and Velo eds, Plenum Press, New York, 1996, chap. 14, 137-154 and Journal of Lipid Mediators and Cell Signalling, 1996, 14, 83-87 and *Prostanoid Receptors, Structure, Properties and Function,* S Narumiya et al, Physiological Reviews 1999, 79(4), 1193-126. An article from *The British Journal of Pharmacology,*1994, 112, 735- 740 suggests that Prostaglandin E_2 (PGE_2) exerts allodynia through the EP_1 receptor subtype and hyperalgesia through EP_2 and EP_3 receptors in the mouse spinal cord. Furthermore an article from *The Journal of Clinical Investigation*, 2001, 107 (3), 325 shows that in the EP_1 knock-out mouse pain-sensitivity responses are reduced by approximately 50%. Two papers from *Anesthesia and Analgesia* have shown that (2001, 93, 1012-7) an EP_1 receptor antagonist (ONO-8711) reduces hyperalgesia and allodynia in a rat model of chronic constriction injury, and that (2001, 92, 233-238) the same antagonist inhibits mechanical hyperalgesia in a rodent model of post-operative pain. S. Sarkar *et al* in *Gastroenterology*, 2003, 124(1), 18-25 demonstrate the efficacy of EP_1 receptor antagonists in the treatment of visceral pain in a human model of hypersensitivity. Thus, selective prostaglandin ligands, agonists or antagonists, depending on which prostaglandin E receptor subtype is being considered, have anti-inflammatory, antipyretic and analgesic properties similar to a conventional non-steroidal anti-inflammatory drug, and in addition, inhibit hormone-induced uterine contractions and have anti-cancer effects. These compounds have a diminished ability to induce some of the mechanism-based side effects of NSAIDs which are indiscriminate cyclooxygenase inhibitors. In particular, the compounds have a reduced potential for gastrointestinal toxicity, a reduced potential for renal side effects, a reduced effect on bleeding times and a lessened ability to induce asthma attacks in aspirin-sensitive asthmatic subjects. Moreover, by sparing potentially beneficial prostaglandin pathways, these agents may have enhanced efficacy over NSAIDS and/or COX-2 inhibitors.

In The American Physiological Society (1994, 267, R289-R-294), studies suggest that PGE_2-induced hyperthermia in the rat is mediated predominantly through the EP_1 receptor. WO 96/06822 (March 7, 1996), WO 96/11902 (April 25, 1996), EP 752421-A1 (January 08, 1997) and WO 01/19814 (22 March 2001) disclose compounds as being useful in the treatment of prostaglandin mediated diseases.

It is now suggested that a novel group of cyclopentene derivatives surprisingly are selective for the EP_1 receptor over the EP_3 receptor, and are therefore indicated to be useful in treating conditions mediated by the action of PGE_2 at EP_1 receptors. Such conditions include pain, or inflammatory, immunological, bone, neurodegenerative or renal disorders.

Accordingly the present invention provides compounds of formula (I):



(I)

wherein:

A represents an optionally substituted aryl, or an optionally substituted 5- or 6- membered heterocyclyl ring, or an optionally substituted bicyclic heterocyclyl group;

B represents a phenyl or pyridyl ring;

Z represents O, S, SO, or SO_2;

R^1 represents CO_2H, CN, $CONR^5R^6$, CH_2CO_2H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted SO_2alkyl, $SO_2NR^5R^6$, $NR^5CONR^5R^6$, COalkyl, 2H-tetrazol-5-yl-methyl, optionally substituted bicyclic heterocycle or optionally substituted heterocyclyl;

R^{2a} and R^{2b} independently represents hydrogen, halo, optionally substituted alkyl, optionally substituted alkoxy, CN, SO_2alkyl, SR^5, NO_2, optionally substituted aryl, $CONR^5R^6$ or optionally substituted heteroaryl;

R^x represents optionally substituted alkyl wherein 1 or 2 of the non-terminal carbon atoms are optionally replaced by a group independently selected from NR^4, O and SO_n, wherein n is 0, 1 or 2: or R^x represents optionally substituted alkenyl, optionally substituted CQ^aQ^b-heterocyclyl, optionally substituted CQ^aQ^b-bicyclic heterocyclyl or optionally substituted CQ^aQ^b-aryl;

R^4 represents hydrogen or an optionally substituted alkyl;

R^5 represents hydrogen or an optionally substituted alkyl;

R^6 represents hydrogen or optionally substituted alkyl, optionally substituted heteroaryl, optionally substituted SO_2aryl, optionally substituted SO_2alkyl, optionally substituted

SO_2heteroaryl, CN, optionally substituted CQ^aQ^baryl, optionally substituted CQ^aQ^bheteroaryl or COR^7;
R^7 represents hydrogen, optionally substituted alkyl, optionally substituted heteroaryl or optionally substituted aryl;
R^8 and R^9 independently represent hydrogen, chloro, fluoro, CF_3, alkoxy or alkyl;
Q^a and Q^b are independently selected from hydrogen and CH_3;
wherein when A is a 6-membered ring the R^1 substituent and cyclopentene ring are attached to carbon atoms 1,2-, 1,3- or 1,4- relative to each other, and when A is a five-membered ring or bicyclic heterocyclyl group the R^1 substituent and cyclopentene ring are attached to substitutable carbon atoms 1,2- or 1,3- relative to each other;
or derivatives thereof.

When A is a six membered ring, preferably R^1 is attached to the group A in the 3 position relative to the bond attaching A to the cyclopentene ring.

Suitable examples of A include phenyl, pyridyl, pyridazinyl and pyrazinyl, all of which may be optionally substituted.

Optional substituents for A include up to four substituents, preferably 0 or 1 substituent, independently selected from halogen, NR^5R^6, NR^5COC_{1-6}alkyl, $NR^5SO_2C_{1-6}$alkyl, OR^5, SR^5, optionally substituted C_{1-4}alkyl e.g. CF_3, CF_3, and C_2H_5, and $NR^{10}R^{11}$ wherein R^{10} and R^{11} together with the nitrogen atom to which they are attached form a morpholine ring, a 5- or 6-membered lactam ring or a 5- or 6-membered cyclic sulphonamide, wherein R^5 and R^6 are as defined above for compounds of formula (I). Particular optional substituents for A are selected from halogen, optionally substituted C_{1-4}alkyl e.g. CF_3, CH_3, and C_2H_5, NH_2, NHC_{1-4}alkyl, $NHCOC_{1-4}$alkyl, and SCH_3.

When B is pyridyl, preferably the pyridine N atom is situated adjacent to the ring carbon carrying the Z substituent.

Preferably Z is O.

Suitably R^1 includes CO_2H, $CONR^5R^6$ e.g. $CONHSO_2$phenyl, CH_2CO_2H, SO_2C_{1-6}alkyl, $SO_2NR^5R^6$, $NR^5CONR^5R^6$, or tetrazolyl. Preferably R^1 represents CO_2H or $CONHSO_2$phenyl.

Particular examples of R^{2a} and R^{2b} include hydrogen, halogen, optionally substituted C_{1-6}alkyl e.g. CF_3 or CH_3, and optionally substituted C_{1-6}alkoxy.

Preferably R^{2a} is hydrogen.

Preferably R^{2b} represents hydrogen, halogen, CF_3, or CH_3.

Preferably R^{2b} is positioned 1,4- relative to the Z substituent and 1,3- relative to the cyclopentene ring.

Suitably R^4 includes hydrogen and C_{1-4}alkyl.

Suitably R^5 includes hydrogen or C_{1-4}alkyl.

Suitably R^6 includes hydrogen, C_{1-4}alkyl or SO_2phenyl.

Suitably R^7 include hydrogen or C_{1-4}alkyl.

Suitably R^8 include CH_3 or hydrogen, in one aspect R^8 represents hydrogen.

An example of R^9 is hydrogen.

An example of Q^a is hydrogen.

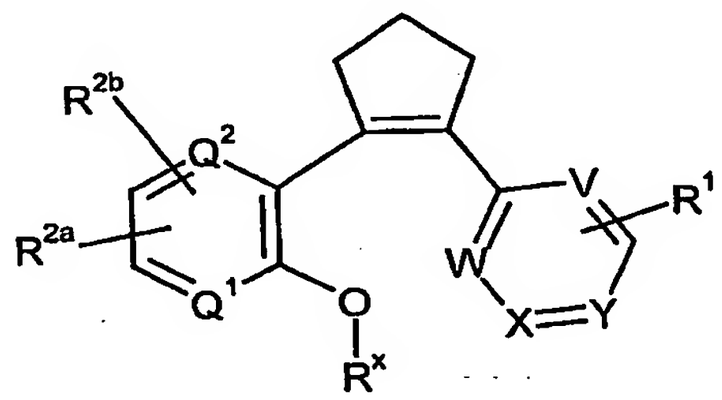
An example of Q^b is hydrogen.

Suitably R^x includes optionally substituted C_{1-8}alkyl, optionally substituted C_{2-8}alkenyl, CH_2phenyl optionally substituted by one, two or three substituents, selected from Cl, Br, F, CF_3, OCF_3, C_{1-4}alkyl, and OC_{1-4}alkyl.

Suitably R^x when an optionally substituted C_{1-8}alkyl includes e.g. methyl, ethyl, propyl, butyl, CH_2cyclopentene and CH_2cyclohexene.

Suitably R^x when an optionally substituted C_{2-8}alkenyl include e.g. $CH_2CH{=}CH_2$ and $CH_2CH{=}CH$-phenyl.

A certain group of compounds of formula (I) are compounds of formula (IA):



(IA)

wherein:

W, X, and Y each represent CR^{12} or N;

V represents CR^1, CR^{12} or N;
wherein at least two of W, X, Y and V is CR^{12}, and R^{12} is independently selected from hydrogen, halogen, CF_3, CH_3, NH_2, NHC_{1-6}alkyl, $NHCOC_{1-6}$alkyl, and SCH_3;
Q^1 and Q^2 each represents CH, or one of Q^1 and Q^2 is N and the other is CH;
R^1 is CO_2H, $CONR^5R^6$, CH_2CO_2H, SO_2C_{1-6}alkyl, $SO_2NR^5R^6$, $NR^5CONR^5R^6$, tetrazolyl or $COSO_2NR^5R^6$;
R^{2a} and R^{2b} are selected from hydrogen, halogen, optionally substituted C_{1-6}alkyl, and optionally substituted C_{1-6}alkoxy;
R^x represents optionally substituted C_{1-8}alkyl, optionally substituted C_{2-8}alkenyl, and optionally substituted CH_2phenyl;
R^5 is hydrogen or C_{1-4}alkyl;
R^6 is hydrogen or C_{1-4}alkyl;
R^{12} is selected from hydrogen, halogen, NR^5R^6, NR^5COC_{1-6}alkyl, $NR^5SO_2C_{1-6}$alkyl, OR^5, SR^5, and optionally substituted C_{1-6}alkyl;
or derivatives thereof.

Suitable eamples of R^x include optionally substituted C_{1-8}alkyl, optionally substituted C_{2-8}alkenyl, and CH_2phenyl optionally substituted by one, two or three substituents, selected from Cl, Br, F, CF_3, OCF_3, C_{1-4}alkyl, and OC_{1-4}alkyl.

In one aspect R^1 is positioned 1,3-relative to the cyclopentene ring.

In another aspect one or two of W, X, Y and V is N.

In yet another aspect one of Q^1 and Q^2 is N.

A particular set of compounds are those wherein one or two of W, X, Y and V is N and Q^1 and Q^2 are both CH; or one of Q^1 and Q^2 is N and W, X, Y, and V are each CR^{12}.

Preferably Q^1 is N or CH and Q^2 is CH.

Preferably R^{2a} is hydrogen.

Preferably R^{2b} is positioned 1,4-relative to OR^x and 1,3-relative to the cyclopentene ring.

Preferably R^{2b} is selected from hydrogen, F, Br, Cl and CF_3.

Suitably R^{12} includes hydrogen, halogen e.g. F or Cl, CF_3, NH_2, $NHCOC_{1-4}$alkyl, SCH_3, and C_{1-4}alkyl, e.g. CH_3 and C_2H_5;

Compounds of formula (I) include the compounds of Examples 1 to 373 and derivatives thereof.

Preferably compounds are selective for EP_1 over EP_3. More preferably the compounds are 100 fold selective, more preferably 1000 fold selective for EP_1 over EP_3.

Derivatives of the compounds of formula (I) include pharmaceutically acceptable derivatives.

The invention is described using the following definitions unless otherwise indicated.

The term "pharmaceutically acceptable derivative" means any pharmaceutically acceptable salt, ester, salt of such ester or solvate of the compounds of formula (I), or any other compound which upon administration to the recipient is capable of providing (directly or indirectly) a compound of formula (I).

It will be appreciated by those skilled in the art that the compounds of formula (I) may be modified to provide pharmaceutically acceptable derivatives thereof at any of the functional groups in the compounds, and that the compounds of formula (I) may be derivatised at more than one position.

It will be appreciated that, for pharmaceutical use, the salts referred to above will be pharmaceutically acceptable salts, but other salts may find use, for example in the preparation of compounds of formula (I) and the pharmaceutically acceptable salts thereof.

Pharmaceutically acceptable salts include those described by Berge, Bighley and Monkhouse , J. Pharm. Sci., 1977, 66, 1-19. The term "pharmaceutically acceptable salts" refers to salts prepared from pharmaceutically acceptable non-toxic bases including inorganic bases and organic bases. Salts derived from inorganic bases include aluminum, ammonium, calcium, copper, ferric, ferrous, lithium, magnesium, manganic salts, manganous, potassium, sodium, zinc, and the like. Particularly preferred are the ammonium, calcium, magnesium, potassium, and sodium salts. Salts derived from pharmaceutically acceptable organic non-toxic bases include salts of primary, secondary, and tertiary amines, substituted amines including naturally occurring substituted amines, cyclic amines, and basic ion exchange resins, such as arginine, betaine, caffeine, choline, N,N'-dibenzylethylenediamine, diethylamine, 2-diethylaminoethanol, 2-dimethylaminoethanol, ethanolamine, ethylenediamine, N-ethyl-morpholine, N-ethylpiperidine, glucamine, glucosamine, histidine, hydrabamine, isopropylamine, lysine, methylglucamine, morpholine, piperazine, piperidine, polyamine resins, procaine, purines, theobromine, triethylamine, trimethylamine, tripropyl amine, tromethamine, and the like. When the compound of the present invention is basic, salts may be prepared from pharmaceutically acceptable non-toxic acids, including inorganic and organic acids. Such acids include acetic, benzenesulfonic, benzoic, camphorsulfonic, citric, ethanesulfonic, fumaric, gluconic, glutamic, hydrobromic, hydrochloric, isethionic, lactic, maleic, malic, mandelic, methanesulfonic, mucic, nitric, pamoic, pantothenic, phosphoric, succinic, sulfuric, tartaric, p-toluenesulfonic acid, and the

like. Particularly preferred are citric, hydrobromic, hydrochloric, maleic, phosphoric, sulfuric, and tartaric acid.

Preferred examples of pharmaceutically acceptable salts include those formed from maleic, fumaric, benzoic, ascorbic, pamoic, succinic, bismethylenesalicylic, methanesulfonic, ethanedisulfonic, propionic, tartaric, salicylic, citric, gluconic, aspartic, stearic, palmitic, itaconic, glycolic, p-aminobenzoic, glutamic, benzenesulfonic, cyclohexylsulfamic, phosphoric and nitric acids.

The compounds of formula (I) may be prepared in crystalline or non-crystalline form, and if crystalline, may be optionally hydrated or solvated. This invention includes in its scope stoichiometric hydrates as well as compounds containing variable amounts of water.

Suitable solvates include pharmaceutically acceptable solvates, such as hydrates.

Solvates include stoichiometric solvates and non-stoichiometric solvates.

The terms "halogen" or "halo" are used to represent fluorine, chlorine, bromine or iodine.

The term "alkyl" as a group or part of a group means a straight, branched or cyclic chain alkyl group or combinations thereof, for example methyl, ethyl, n-propyl, i-propyl, n-butyl, s-butyl, t-butyl, pentyl, hexyl, 1,1-dimethylethyl, cyclopentyl or cyclohexyl or combinations thereof such as cyclohexylmethyl and cyclopentylmethyl. Unless otherwise defined, preferably "alkyl" is C_{1-8}alkyl, more preferably "alkyl" is C_{1-6}alkyl.

The term "alkoxy" as a group or as part of a group means a straight, branched or cyclic chain alkyl group having an oxygen atom attached to the chain, for example a methoxy, ethoxy, n-propoxy, i-propoxy, n-butoxy, s-butoxy, t-butoxy group, pentoxy, hexyloxy group, cyclopentoxy or cyclohexyloxy group. Preferably "alkoxy" is C_{1-6} alkoxy.

The term "alkenyl" means linear or branched structures and combinations thereof, of the indicated number of carbon atoms, having at least one carbon-to-carbon double bond, wherein hydrogen may be replaced by an additional carbon to carbon double bond. Preferably "alkenyl" is C_{2-6}alkenyl. C_{2-6}alkenyl, for example, includes ethenyl, propenyl, 1-methylethenyl, butenyl and the like.

The term "heterocyclyl" as a group or as part of a group means an aromatic or non-aromatic five or six membered ring which contains from 1 to 4 heteroatoms selected from nitrogen, oxygen or sulfur and unsubstituted or substituted by, for example, up to three substituents. Examples of 5- membered heterocyclyl groups include furyl, dioxalanyl, pyrrolyl, oxazolyl, thiazolyl, imidazolyl, oxadiazolyl, thiadiazolyl, triazolyl, triazinyl,

isothiazolyl, isoxazolyl, thiophenyl, pyrazolyl or tetrazolyl. Examples of 6-membered heterocyclyl groups are pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl, triazinyl or tetrazinyl.

The term "aryl" as a group or part of a group means a 5- or 6- membered aromatic ring, for example phenyl, or a 7 to 12 membered bicyclic ring system where at least one of the rings is aromatic, for example naphthyl. An aryl group may be optionally substituted by one or more substituents, for example up to 4, 3 or 2 substituents. Preferably the aryl group is phenyl.

The term "heteroaryl" as a group or as part of a group means a monocyclic five or six membered aromatic ring, or a fused bicyclic aromatic ring system comprising two of such monocyclic five or six membered aromatic rings. These heteroaryl rings contain one or more heteroatoms selected from nitrogen, oxygen or sulfur, where N-oxides, sulfur oxides and sulfur dioxides are permissible heteroatom substitutions. A heteroaryl group may be optionally substituted by one or more substituents, for example up to 3 or up to 2 substituents. Examples of "heteroaryl" used herein include furyl, thienyl, pyrrolyl, imidazolyl, pyrazolyl, triazolyl, tetrazolyl, thiazolyl, oxazolyl, isoxazolyl, oxadiazolyl, thiadiazolyl, isothiazolyl, pyridinyl, pyrimidinyl, quinolinyl, isoquinolinyl, benzofuryl, benzothienyl, indolyl, and indazolyl.

The term "bicyclic heterocyclyl" when used herein means a fused bicyclic aromatic or non-aromatic bicyclic heterocyclyl ring system comprising up to four, preferably one or two, heteroatoms each selected from oxygen, nitrogen and sulphur. Each ring may have from 4 to 7, preferably 5 or 6, ring atoms. A bicyclic heteroaromatic ring system may include a carbocyclic ring. Examples of bicyclic heterocyclyl groups include quinolinyl, isoquinolinyl, quinoxalinyl, quinazolinyl, pyridopyrazinyl, benzoxazolyl, benzothiophenyl, benzimidazolyl, benzothiazolyl, benzoxadiazolyl, benzthiadiazolyl, indolyl, benztriazolyl or naphthyridinyl.

When the heteroatom nitrogen replaces a carbon atom in an alkyl group, or when nitrogen is present in a heteroaryl, heterocyclyl or bicyclic heterocyclyl group, the nitrogen atom will, where appropriate, be substituted by one or two substituents selected from hydrogen and C_{1-6}alkyl, preferably hydrogen and C_{1-6}alkyl, more preferably hydrogen.

Optional substituents for alkyl or alkenyl groups unless hereinbefore defined include OH, CO_2R^4, NR^4R^5, (O), -OC_{1-6}alkyl or halo e.g. Cl, Br or F, wherein R^4, and R^5 are as hereinbefore defined for compounds of formula (I). An alkyl or alkenyl group may be substituted by one or more optional substituents, for example up to 5, 4, 3, or 2 optional substituents. Particular substituted alkyl groups include those subsituted by one or more fluorines e.g. CH_2F, CHF_2, CF_3, C_2F_5 etc, especially CF_3.

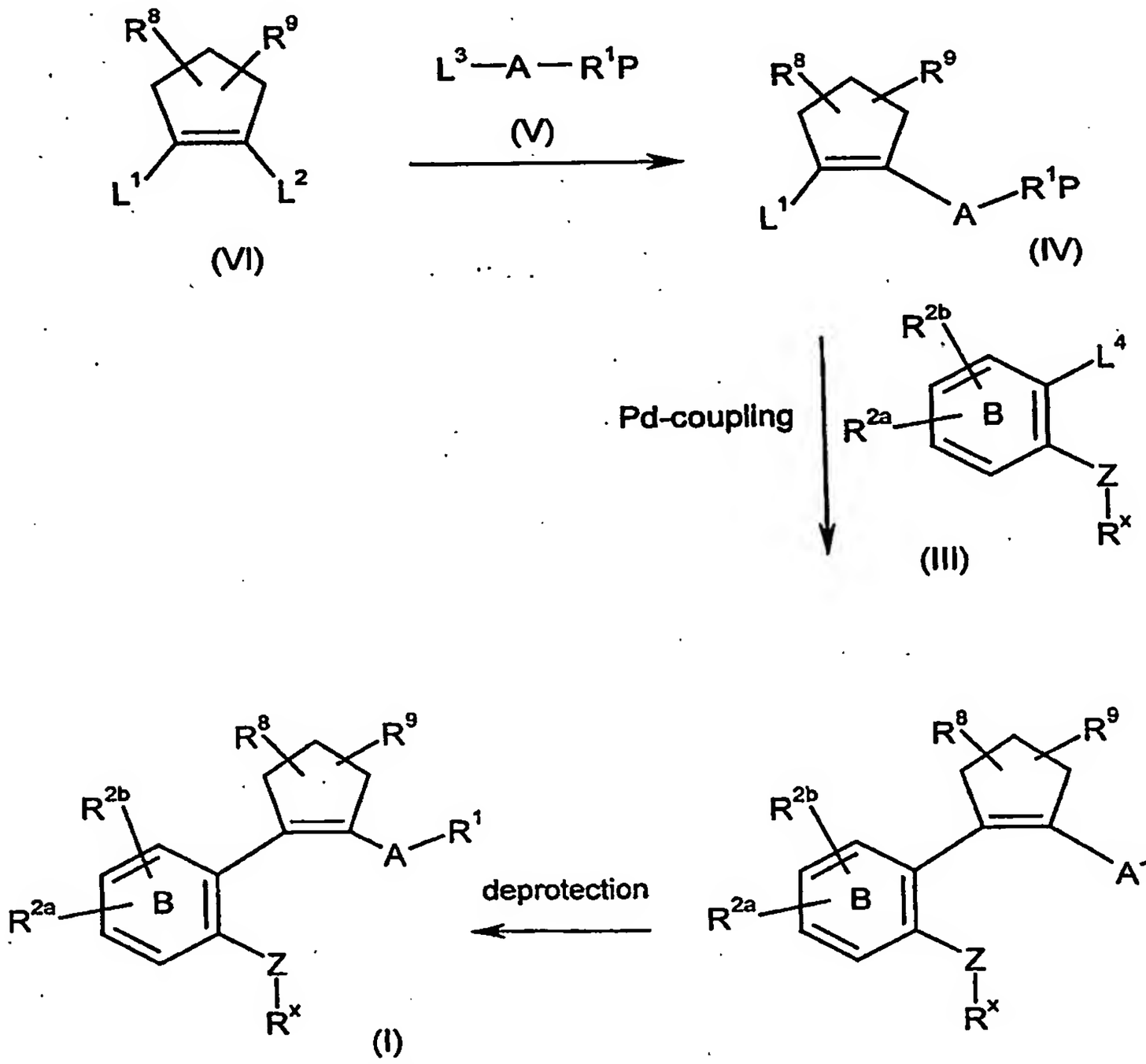
Optional substituents for alkoxy groups unless hereinbefore defined include OH, and halo e.g. Cl, Br or F. An alkoxy group may be substituted by one or more optional substituents, for

example up to 5, 4, 3, or 2 optional substituents. Particular substituted alkoxy groups include those subsituted by one or more fluorines e.g. OCH_2F, $OCHF_2$, OCF_3, OC_2F_5 etc.

Unless otherwise defined, optional substituents for aryl, heteroaryl or heterocyclyl moieties as a group or part of a group are selected from optionally substituted C_{1-6}alkyl, optionally substituted C_{1-6}alkoxy and halogen.

Compounds of formula (I) can be prepared as set forth in the following schemes and in the examples. The following processes form another aspect of the present invention.

For example, compounds of formula (I) may be prepared by the general route below:



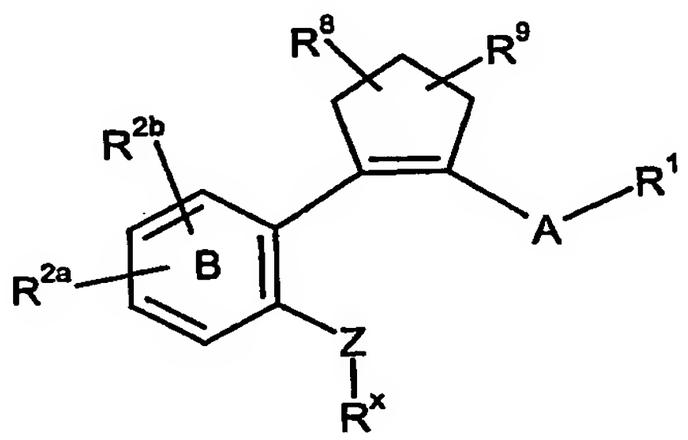
wherein L^1, L^2, are leaving groups for example halo, or triflate; L^3 and L^4 are activating groups, for example boronic acid; P is an optional protecting group; and A, B, R^1, R^{2a}, R^{2b}, R^8, R^9, Z and R^x are as defined for compounds of formula (I). L^1 can be converted to L^{1a}, and L^2 can be converted to L^{2a} wherein L^{1a} and L^{2a} are activating groups for example a boronic acid, and in this situation L^3 and L^4 can be halo or triflate.

When R^1 is CO_2H examples of P include methyl, ethyl or substituted benzyl esters.

Suitable reaction conditions for the deprotection of a compound of formula (II) include heating in aqueous ethanolic sodium hydroxide solution.

Suitable reaction conditions for the reaction of a compound of formula (VI) with a boronic acid of formula (V) (wherein L^3 is $-B(OH)_2$) or a compound of formula (IV) with a boronic acid of formula (III) (wherein L^4 is $-B(OH)_2$) include heating with tetrakis(triphenylphosphine)palladium (0) and an inorganic base, for example potassium carbonate, in a solvent, e.g. ethylene glycol dimethyl ether (DME), toluene and ethanol, preferably in a ratio of 1:1.

Accordingly the present invention also provides a process for the preparation of a compound of formula (I) or a derivative thereof:



(I)

wherein:

A represents an optionally substituted aryl, or an optionally substituted 5- or 6- membered heterocyclyl ring, or an optionally substituted bicyclic heterocyclyl group;

B represents a phenyl or pyridyl ring;

Z represents O, S, SO, or SO_2;

R^1 represents CO_2H, CN, $CONR^5R^6$, CH_2CO_2H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted SO_2alkyl, $SO_2NR^5R^6$, $NR^5CONR^5R^6$, COalkyl, 2H-tetrazol-5-yl-methyl, optionally substituted bicyclic heterocycle or optionally substituted heterocyclyl;

R^{2a} and R^{2b} independently represents hydrogen, halo, optionally substituted alkyl, optionally substituted alkoxy, CN, SO_2alkyl, SR^5, NO_2, optionally substituted aryl, $CONR^5R^6$ or optionally substituted heteroaryl;

R^x represents optionally substituted alkyl wherein 1 or 2 of the non-terminal carbon atoms are optionally replaced by a group independently selected from NR^4, O and SO_n, wherein n is 0, 1 or 2: or R^x represents optionally substituted alkenyl, optionally substituted CQ^aQ^b-heterocyclyl, optionally substituted CQ^aQ^b-bicyclic heterocyclyl or optionally substituted CQ^aQ^b-aryl;

R^4 represents hydrogen or an optionally substituted alkyl;

R^5 represents hydrogen or an optionally substituted alkyl;

R^6 represents hydrogen or optionally substituted alkyl, optionally substituted heteroaryl, optionally substituted SO_2aryl, optionally substituted SO_2alkyl, optionally substituted SO_2heteroaryl, CN, optionally substituted CQ^aQ^baryl, optionally substituted CQ^aQ^bheteroaryl or COR^7;

R^7 represents hydrogen, optionally substituted alkyl, optionally substituted heteroaryl or optionally substituted aryl;

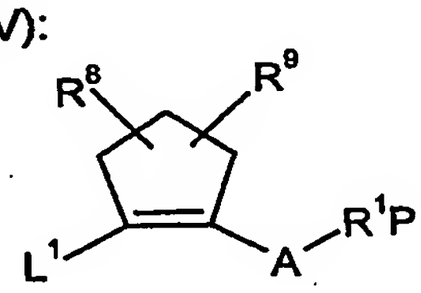
R^8 and R^9 independently represent hydrogen, chloro, fluoro, CF_3, alkoxy or alkyl;

Q^a and Q^b are independently selected from hydrogen and CH_3;

wherein when A is a 6-membered ring the R^1 substituent and cyclopentene ring are attached to carbon atoms 1,2-, 1,3- or 1,4- relative to each other, and when A is a five-membered ring or bicyclic heterocyclyl group the R^1 substituent and cyclopentene ring are attached to substitutable carbon atoms 1,2- or 1,3- relative to each other;

comprising:

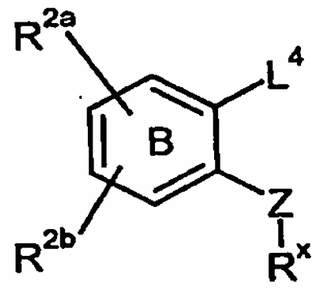
reacting a compound of formula (IV):



(IV)

wherein R^8, R^9, A, and R^1 are as hereinbefore defined above for a compound of formula (I), L^1 is a leaving group and P is an optional protecting group;

with a compound of formula (III):



(III)

wherein R^{2a} ,R^{2b} , B, Z, and R^x are as hereinbefore defined above for a compound of formula (I) and L^4 is an activating group;

and where required converting:

one group A to another group A, and/or

one group R^x to another group R^x;

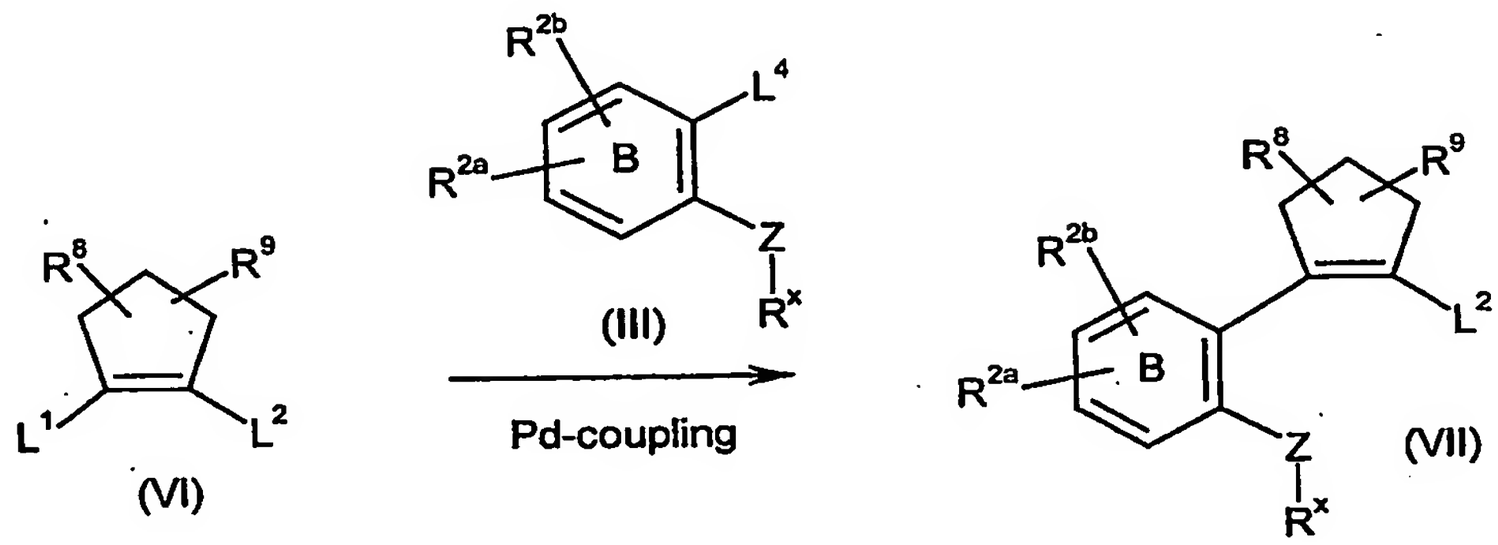
and where required carrying out the following optional steps in any order:

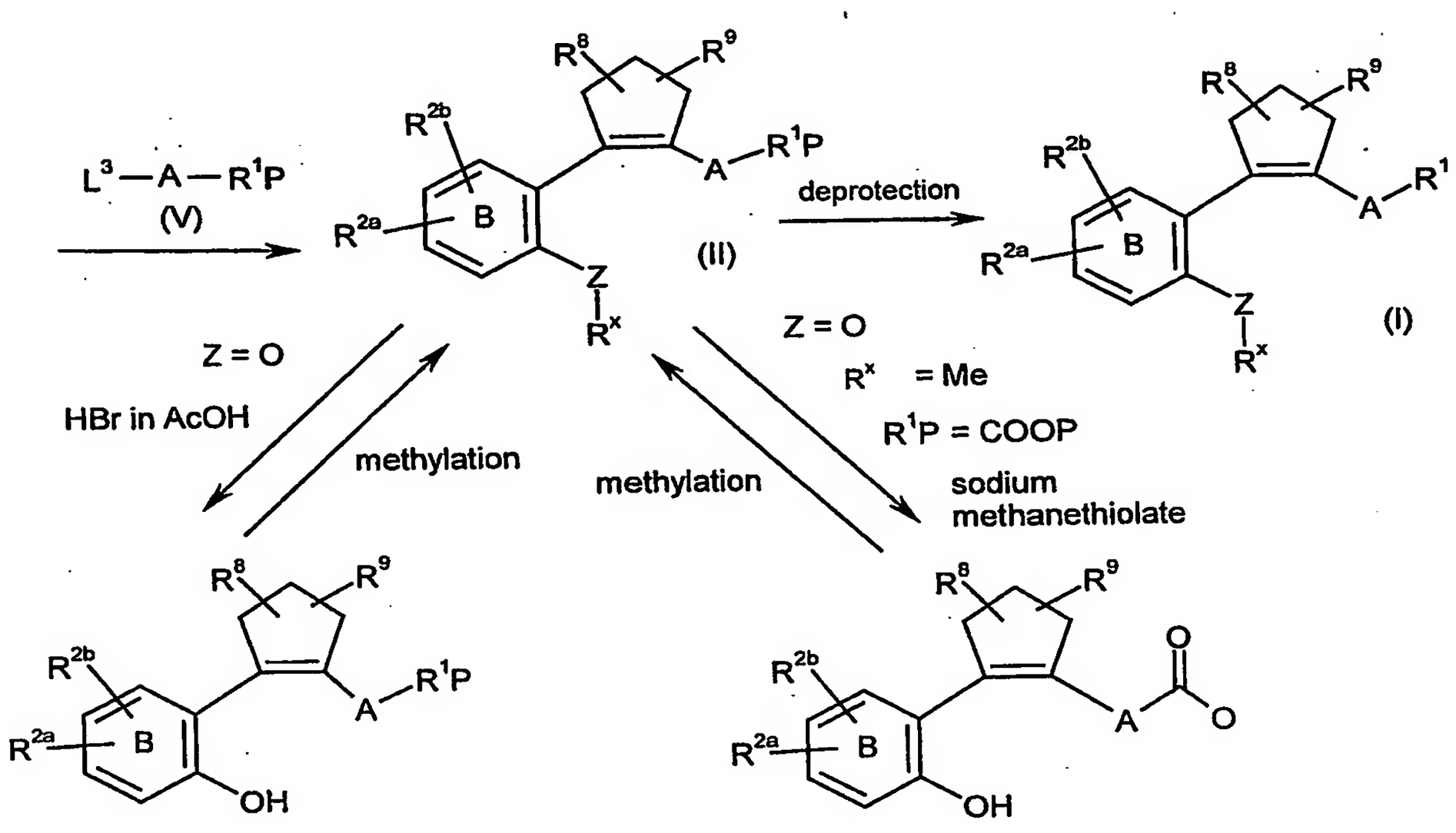
effecting deprotection; and/or

converting one group R^1 to another group R^1; and/or

forming a derivative of the compound of formula (I) so formed.

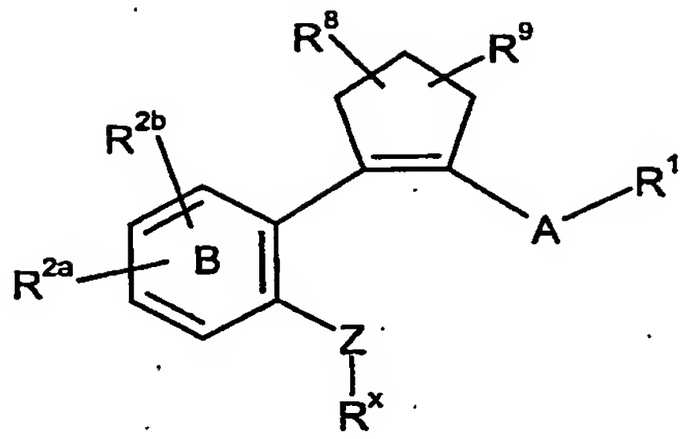
Alternatively compounds of formula (I) may be prepared according to the route described below:





wherein L^1, L^2, L^3, L^4 and P are as defined above, and A, B, R^1, R^{2a}, R^{2b}, R^8, R^9, Z, and R^x are as defined for compounds of formula (I). L^1 can be converted to L^{1a}, and L^2 can be converted to L^{2a} wherein L^{1a} and L^{2a} are activating groups for example a boronic acid, and in this situation L^3 and L^4 can be halo or triflate.

Accordingly the present invention also provides a process for the preparation of a compound of formula (I) or a derivative thereof:



(I)

wherein:

A represents an optionally substituted aryl, or an optionally substituted 5- or 6- membered heterocyclyl ring, or an optionally substituted bicyclic heterocyclyl group;

B represents a phenyl or pyridyl ring;

Z represents O, S, SO, or SO_2;

R^1 represents CO_2H, CN, $CONR^5R^6$, CH_2CO_2H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted SO_2alkyl, $SO_2NR^5R^6$, $NR^5CONR^5R^6$, COalkyl, 2H-tetrazol-5-yl-methyl, optionally substituted bicyclic heterocycle or optionally substituted heterocyclyl;

R^{2a} and R^{2b} independently represents hydrogen, halo, optionally substituted alkyl, optionally substituted alkoxy, CN, SO_2alkyl, SR^5, NO_2, optionally substituted aryl, $CONR^5R^6$ or optionally substituted heteroaryl;

R^x represents optionally substituted alkyl wherein 1 or 2 of the non-terminal carbon atoms are optionally replaced by a group independently selected from NR^4, O and SO_n, wherein n is 0, 1 or 2: or R^x represents optionally substituted alkenyl, optionally substituted CQ^aQ^b-heterocyclyl, optionally substituted CQ^aQ^b-bicyclic heterocyclyl or optionally substituted CQ^aQ^b-aryl;

R^4 represents hydrogen or an optionally substituted alkyl;

R^5 represents hydrogen or an optionally substituted alkyl;

R^6 represents hydrogen or optionally substituted alkyl, optionally substituted heteroaryl, optionally substituted SO_2aryl, optionally substituted SO_2alkyl, optionally substituted SO_2heteroaryl, CN, optionally substituted CQ^aQ^baryl, optionally substituted CQ^aQ^bheteroaryl or COR^7;

R^7 represents hydrogen, optionally substituted alkyl, optionally substituted heteroaryl or optionally substituted aryl;

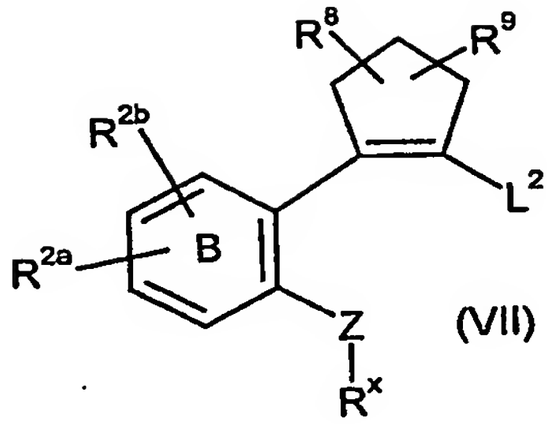
R^8 and R^9 independently represent hydrogen, chloro, fluoro, CF_3, alkoxy or alkyl;

Q^a and Q^b are independently selected from hydrogen and CH_3;

wherein when A is a 6-membered ring the R^1 substituent and cyclopentene ring are attached to carbon atoms 1,2-, 1,3- or 1,4- relative to each other, and when A is a five-membered ring or bicyclic heterocyclyl group the R^1 substituent and cyclopentene ring are attached to substitutable carbon atoms 1,2- or 1,3- relative to each other;

comprising:

reacting a compound of formula (VII):



(VII)

wherein R^{2a}, R^{2b}, R^8, R^9, A, B, R^x and R^1 are as hereinbefore defined above for a compound of formula (I), and L^2 is a leaving group;

with a compound of formula (V):

$$L^3—A—R^1P$$

(V)

wherein R^1, and A are as hereinbefore defined above for a compound of formula (I); L^3 is an activating group and P is an optional protecting group;

and where required converting:

one group A to another group A, and/or

one group R^x to another group R^x;

and where required carrying out the following optional steps in any order:

effecting deprotection; and/or

converting one group R^1 to another group R^1; and/or

forming a derivative of the compound of formula (I) so formed.

It will be appreciated that certain substituents in intermediates and compounds of formula (I) may be converted to other substituents by conventional methods known to those skilled in the art.

A group R^1 may be converted to another group R^1 by use of conventional organic transformations known to those skilled in the art. For example $R^1 = CO_2H$ may be converted to an amide, e.g. $CONHCQ^aQ^b$aryl or $CONHCQ^aQ^b$heteroaryl wherein Q^a and Q^b are selected from hydrogen and CH_3, by conventional methods for the preparation of amides as described in, for example, Richard Larock, *Comprehensive Organic Transformations,* 2nd edition, Wiley-VCH, ISBN 0-471-19031-4.

Cyclopentene derivatives of formula (VI), boronic acids of formula (III) and (V), and tetrakis(triphenylphosphine)palladium (0) are commercially available, or readily prepared by methods known to those skilled in the art.

The preparation and reactions of boronic acids of formula (III) and formula (V) is reviewed in Suzuki *et al*, *Synth. Commun.*, 1981, 11, 513; Martin *et al*, *Acta. Chim. Scand.*, 1993,

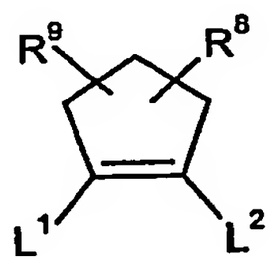
47, 221; and Miyaura *et al*, *Chem. Rev.*, 1995, 95, 2457. For example, 2-benzyloxy-5-chlorophenylboronic acid may be prepared from 2-benzyloxy-5-chloro-iodobenzene. 2-Benzyloxy-5-chloro-iodobenzene may be prepared from 4-chloro-2-iodoanisole by demethylation followed by benzylation according to known methods.

Certain substituents in any of the reaction intermediates and compounds of formula (I) may be converted to other substituents by conventional methods known to those skilled in the art. Examples of substituents which may be converted include one group R^x to another group R^x; and one substituent on a group A to another substituent on a group A. Examples of such transformations include the reduction of a nitro group to give an amino group; alkylation and amidation of amino groups; hydrolysis of esters, alkylation of hydroxy and amino groups; and amidation and esterification of carboxylic acids. Such transformations are well known to those skilled in the art and are described in for example, Richard Larock, *Comprehensive Organic Transformations,* 2nd edition, Wiley-VCH, ISBN 0-471-19031-4.

For example, when R^x is p-methoxybenzyl, cleavage of the ether to give the phenol or pyridinol is carried out using, for example, using acid e.g. HCl/dioxane or using sodium methanethiolate. When R^x is methyl, cleavage of the ether to give the phenol is carried out using, for example, sodium methanethiolate. Cleavage of the ether to give a pyridinol is carried out in the presence of, for example, trifluoroacetic acid. Conversion to another R^x group, for example a substituted benzyl group, may be effected by reaction of the phenol or pyridinol with a suitable substituted benzyl bromide. The skilled person will appreciate that conversion of the protecting group P to another protecting group P may also occur under the reaction conditions used. When R^x is benzyl, cleavage of the ether to give the phenol or pyridinol may be carried out by hydrogenation according to known methods e.g. H_2-Pd/C or NH_4CO_2H-Pd/C. The resulting phenol or pyridinol can then be converted to another group R^x as described above.

It will be appreciated by those skilled in the art that it may be necessary to protect certain reactive substituents during some of the above procedures. The skilled person will recognise when a protecting group is required. Standard protection and deprotection techniques, such as those described in Greene T.W. 'Protective groups in organic synthesis', New York, Wiley (1981), can be used. For example, carboxylic acid groups can be protected as esters. Deprotection of such groups is achieved using conventional procedures known in the art. It will be appreciated that protecting groups may be interconverted by conventional means.

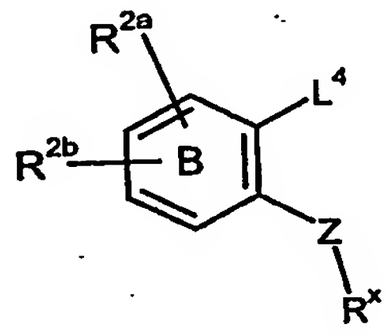
Cyclopentene intermediates of the formula (VI):



(VI)

wherein L^1, L^2 are as defined above, and $R^8$and R^9 are as hereinbefore defined for compounds of formula (I) are commercially available or may be readily prepared according to known methods.

Compounds of the formula (III):



wherein L^4 is as hereinbefore defined, R^{2a}, R^{2b}, Z, B and R^x and are as defined for compounds of formula (I) are commercially available, or may readily be prepared by methods known to those skilled in the art, for example from suitable commercially available pyridinols, anisoles or phenols using methods as described in the examples.

Compounds of the formula (V):

$$L^3—A—R^1P$$

wherein L^3 and P are as defined above and R^1 and A are as hereinbefore defined for compounds of formula (I) are commercially available or may readily be prepared, for example, from suitable halobenzoic acid esters according to known methods, for example using methods as described in the examples.

It is to be understood that the present invention encompasses all isomers of formula (I) and their pharmaceutically acceptable derivatives, including all geometric, tautomeric and optical forms, and mixtures thereof (e.g. racemic mixtures). Where additional chiral centres are present in compounds of formula (I), the present invention includes within its scope all possible diastereoismers, including mixtures thereof. The different isomeric forms may be separated or resolved one from the other by conventional methods, or any given isomer may be obtained by conventional synthetic methods or by stereospecific or asymmetric syntheses.

The compounds of the invention bind to the EP_1 receptor and are therefore useful in treating conditions mediated by the action of PGE_2 at EP_1 receptors.

In view of their ability to bind to the EP_1 receptor, the compounds of the invention may be useful in the treatment of the disorders that follow.

The compounds of formula (I) may be useful as analgesics. They are therefore useful in the treatment or prevention of pain.

The compounds of formula (I) may be used as an analgesic to treat acute pain, chronic pain, neuropatic pain, inflammatory pain, visceral pain, pain associated with cancer and fibromyalgia, pain associated with migraine, tension headache and cluster headaches, and pain associated with functional bowel disorders, non-cardiac chest pain and non-ulcer dispepsia.

The compounds of formula (I) may be useful in the treatment of chronic articular pain (e.g. rheumatoid arthritis, osteoarthritis, rheumatoid spondylitis, gouty arthritis and juvenile arthritis) including the property of disease modification and joint structure preservation; musculoskeletal pain; lower back and neck pain; sprains and strains; neuropathic pain; sympathetically maintained pain; myositis; pain associated with cancer and fibromyalgia; pain associated with migraine; pain associated with influenza or other viral infections, such as the common cold; rheumatic fever; pain associated with functional bowel disorders such as non-ulcer dyspepsia, non-cardiac chest pain and irritable bowel syndrome; pain associated with myocardial ischemia; post operative pain; headache; toothache; and dysmenorrhea. The compounds of the invention may also be useful in the treatment of visceral pain.

The compounds of the invention may be particularly useful in the treatment of neuropathic pain. Neuropathic pain syndromes can develop following neuronal injury and the resulting pain may persist for months or years, even after the original injury has healed. Neuronal injury may occur in the peripheral nerves, dorsal roots, spinal cord or certain regions in the brain. Neuropathic pain syndromes are traditionally classified according to the disease or event that precipitated them. Neuropathic pain syndromes include: diabetic neuropathy; sciatica; non-specific lower back pain; multiple sclerosis pain; fibromyalgia; HIV-related neuropathy; post-herpetic neuralgia; trigeminal neuralgia; and pain resulting from physical trauma, amputation, cancer, toxins or chronic inflammatory conditions. These conditions are difficult to treat and although several drugs are known to have limited efficacy, complete pain control is rarely achieved. The symptoms of neuropathic pain are heterogeneous and are often described as spontaneous shooting and lancinating pain, or ongoing, burning pain. In addition, there is pain associated with normally non-painful sensations such as "pins and needles" (paraesthesias and dysesthesias), increased sensitivity to touch (hyperesthesia), painful sensation following innocuous stimulation (dynamic, static or thermal allodynia), increased sensitivity to noxious stimuli (thermal,

cold, mechanical hyperalgesia), continuing pain sensation after removal of the stimulation (hyperpathia) or an absence of or deficit in selective sensory pathways (hypoalgesia).

The compounds of formula (I) may also be useful in the treatment of fever.

The compounds of formula (I) may also be useful in the treatment of inflammation, for example in the treatment of skin conditions (e.g. sunburn, burns, eczema, dermatitis, psoriasis); ophthalmic diseases such as glaucoma, retinitis, retinopathies, uveitis and of acute injury to the eye tissue (e.g. conjunctivitis); lung disorders (e.g. asthma, bronchitis, emphysema, allergic rhinitis, respiratory distress syndrome, pigeon fancier's disease, farmer's lung, chronic obstructive pulmonary disease, (COPD); gastrointestinal tract disorders (e.g. aphthous ulcer, Crohn's disease, atopic gastritis, gastritis varialoforme, ulcerative colitis, coeliac disease, regional ileitis, irritable bowel syndrome, inflammatory bowel disease, gastrointestinal reflux disease); organ transplantation; other conditions with an inflammatory component such as vascular disease, migraine, periarteritis nodosa, thyroiditis, aplastic anaemia, Hodgkin's disease, sclerodoma, myaesthenia gravis, multiple sclerosis, sorcoidosis, nephrotic syndrome, Bechet's syndrome, polymyositis, gingivitis, myocardial ischemia, pyrexia, systemic lupus erythematosus, tendinitis, bursitis, and Sjogren's syndrome.

The compounds of formula (I) are also useful in the treatment of immunological diseases such as autoimmune diseases, immunological deficiency diseases or organ transplantation. The compounds of formula (I) are also effective in increasing the latency of HIV infection.

The compounds of formula (I) are also useful in the treatment of diseases of abnormal platelet function (e.g. occlusive vascular diseases).
The compounds of formula (I) are also useful for the preparation of a drug with diuretic action.

The compounds of formula (I) are also useful in the treatment of impotence or erectile dysfunction.

The compounds of formula (I) are also useful in the treatment of bone disease characterised by abnormal bone metabolism or resorbtion such as osteoporosis (especially postmenopausal osteoporosis), hyper-calcemia, hyperparathyroidism, Paget's bone diseases, osteolysis, hypercalcemia of malignancy with or without bone metastases, rheumatoid arthritis, periodontitis, osteoarthritis, ostealgia, osteopenia, cancer cacchexia, calculosis, lithiasis (especially urolithiasis), solid carcinoma, gout and ankylosing spondylitis, tendinitis and bursitis.

The compounds of formula (I) are also useful for attenuating the hemodynamic side effects of non-steroidal anti-inflammatory drugs (NSAID's) and cyclooxygenase-2 (COX-2) inhibitors.

The compounds of formula (I) are also useful in the treatment of cardiovascular diseases such as hypertension or myocardiac ischemia; functional or organic venous insufficiency; varicose therapy; haemorrhoids; and shock states associated with a marked drop in arterial pressure (e.g. septic shock).

The compounds of formula (I) are also useful in the treatment of neurodegenerative diseases and neurodegeneration such as dementia, particularly degenerative dementia (including senile dementia, Alzheimer's disease, Pick's disease, Huntingdon's chorea, Parkinson's disease and Creutzfeldt-Jakob disease, ALS, motor neuron disease); vascular dementia (including multi-infarct dementia); as well as dementia associated with intracranial space occupying lesions; trauma; infections and related conditions (including HIV infection); metabolism; toxins; anoxia and vitamin deficiency; and mild cognitive impairment associated with ageing, particularly Age Associated Memory Impairment. The compounds of formula (I) are also useful in the treatment of neuroprotection and in the treatment of neurodegeneration following stroke, cardiac arrest, pulmonary bypass, traumatic brain injury, spinal cord injury or the like.

The compounds of formula (I) are also useful in the treatment of tinnitus.

The compounds of formula (I) are also useful in preventing or reducing dependence on, or preventing or reducing tolerance or reverse tolerance to, a dependence - inducing agent. Examples of dependence inducing agents include opioids (e.g. morphine), CNS depressants (e.g. ethanol), psychostimulants (e.g. cocaine) and nicotine.
The compounds of formula (I) are also useful in the treatment of complications of Type 1 diabetes (e.g. diabetic microangiopathy, diabetic retinopathy, diabetic nephropathy, macular degeneration, glaucoma), nephrotic syndrome, aplastic anaemia, uveitis, Kawasaki disease and sarcoidosis.

The compounds of formula (I) are also useful in the treatment of kidney dysfunction (nephritis, particularly mesangial proliferative glomerulonephritis, nephritic syndrome), liver dysfunction (hepatitis, cirrhosis), gastrointestinal dysfunction (diarrhoea) and colon cancer.

The compounds of formula (I) are also useful in the treatment of overactive bladder and urge incontenance.

It is to be understood that reference to treatment includes both treatment of established symptoms and prophylactic treatment, unless explicitly stated otherwise.

According to a further aspect of the invention, we provide a compound of formula (I) or a pharmaceutically acceptable derivative thereof for use in human or veterinary medicine.

According to another aspect of the invention, we provide a compound of formula (I) or a pharmaceutically acceptable derivative thereof for use in the treatment of a condition which is mediated by the action of PGE_2 at EP_1 receptors.

According to a further aspect of the invention, we provide a method of treating a human or animal subject suffering from a condition which is mediated by the action of PGE_2 at EP_1 receptors which comprises administering to said subject an effective amount of a compound of formula (I) or a pharmaceutically acceptable derivative thereof.

According to a further aspect of the invention we provide a method of treating a human or animal subject suffering from a pain, or an inflammatory, immunological, bone, neurodegenerative or renal disorder, which method comprises administering to said subject an effective amount of a compound of formula (I) or a pharmaceutically acceptable derivative thereof.

According to a yet further aspect of the invention we provide a method of treating a human or animal subject suffering from inflammatory pain, neuropathic pain or visceral pain which method comprises administering to said subject an effective amount of a compound of formula (I) or a pharmaceutically acceptable derivative thereof.

According to another aspect of the invention, we provide the use of a compound of formula (I) or a pharmaceutically acceptable derivative thereof for the manufacture of a medicament for the treatment of a condition which is mediated by the action of PGE_2 at EP_1 receptors.

According to another aspect of the invention we provide the use of a compound of formula (I) or a pharmaceutically acceptable derivative thereof for the manufacture of a medicament for the treatment or prevention of a condition such as a pain, or an inflammatory, immunological, bone, neurodegenerative or renal disorder.

According to another aspect of the invention we provide the use of a compound of formula (I) or a pharmaceutically acceptable derivative thereof for the manufacture of a medicament for the treatment or prevention of a condition such as inflammatory pain, neuropathic pain or visceral pain.

The compounds of formula (I) and their pharmaceutically acceptable derivatives are conveniently administered in the form of pharmaceutical compositions. Such compositions may conveniently be presented for use in conventional manner in admixture with one or more physiologically acceptable carriers or excipients.

Thus, in another aspect of the invention, we provide a pharmaceutical composition comprising a compound of formula (I) or a pharmaceutically acceptable derivative thereof adapted for use in human or veterinary medicine.

The compounds of formula (I) and their pharmaceutically acceptable derivatives may be formulated for administration in any suitable manner. They may, for example, be formulated for topical administration or administration by inhalation or, more preferably, for oral, transdermal or parenteral administration. The pharmaceutical composition may be in a form such that it can effect controlled release of the compounds of formula (I) and their pharmaceutically acceptable derivatives.

For oral administration, the pharmaceutical composition may take the form of, for example, tablets (including sub-lingual tablets), capsules, powders, solutions, syrups or suspensions prepared by conventional means with acceptable excipients.

For transdermal administration, the pharmaceutical composition may be given in the form of a transdermal patch, such as a transdermal iontophoretic patch.

For parenteral administration, the pharmaceutical composition may be given as an injection or a continuous infusion (e.g. intravenously, intravascularly or subcutaneously). The compositions may take such forms as suspensions, solutions or emulsions in oily or aqueous vehicles and may contain formulatory agents such as suspending, stabilising and/or dispersing agents. For administration by injection these may take the form of a unit dose presentation or as a multidose presentation preferably with an added preservative. Alternatively for parenteral administration the active ingredient may be in powder form for reconstitution with a suitable vehicle.

The compounds of the invention may also be formulated as a depot preparation. Such long acting formulations may be administered by implantation (for example subcutaneously or intramuscularly) or by intramuscular injection. Thus, for example, the compounds of the invention may be formulated with suitable polymeric or hydrophobic materials (for example as an emulsion in an acceptable oil) or ion exchange resins, or as sparingly soluble derivatives, for example, as a sparingly soluble salt.

The EP_1 receptor compounds for use in the instant invention may be used in combination with other therapeutic agents, for example COX-2 inhibitors, such as celecoxib, deracoxib, rofecoxib, valdecoxib, parecoxib or COX-189; 5-lipoxygenase inhibitors; NSAID's, such as diclofenac, indomethacin, nabumetone or ibuprofen; leukotriene receptor antagonists; DMARD's such as methotrexate; adenosine A1 receptor agonists; sodium channel blockers, such as lamotrigine; NMDA receptor modulators, such as glycine receptor antagonists; gabapentin and related compounds; tricyclic antidepressants such as

amitriptyline; neurone stabilising antiepileptic drugs; mono-aminergic uptake inhibitors such as venlafaxine; opioid analgesics; local anaesthetics; $5HT_1$ agonists, such as triptans, for example sumatriptan, naratriptan, zolmitriptan, eletriptan, frovatriptan, almotriptan or rizatriptan; nicotinic acetyl choline (nACh) receptor modulators; glutamate receptor modulators, for example modulators of the NR2B ssubtype; EP_4 receptor ligands; EP_2 receptor ligands; EP_3 receptor ligands; EP_4 antagonists; EP_2 antagonists and EP_3 antagonists; cannabanoid receptor ligands; bradykinin receptor ligands and vanilloid receptor ligand. When the compounds are used in combination with other therapeutic agents, the compounds may be administered either sequentially or simultaneously by any convenient route.

Additional COX-2 inhibitors are disclosed in US Patent Nos. 5,474,995 US5,633,272; US5,466,823, US6,310,099 and US6,291,523; and in WO 96/25405, WO 97/38986, WO 98/03484, WO 97/14691, WO99/12930, WO00/26216, WO00/52008, WO00/38311, WO01/58881 and WO02/18374.

The invention thus provides, in a further aspect, a combination comprising a compound of formula (I) or a pharmaceutically acceptable derivative thereof together with a further therapeutic agent or agents.

The combinations referred to above may conveniently be presented for use in the form of a pharmaceutical formulation and thus pharmaceutical formulations comprising a combination as defined above together with a pharmaceutically acceptable carrier or excipient comprise a further aspect of the invention. The individual components of such combinations may be administered either sequentially or simultaneously in separate or combined pharmaceutical formulations.

When a compound of formula (I) or a pharmaceutically acceptable derivative thereof is used in combination with a second therapeutic agent active against the same disease state the dose of each compound may differ from that when the compound is used alone. Appropriate doses will be readily appreciated by those skilled in the art.

A proposed daily dosage of compounds of formula (I) or their pharmaceutically acceptable derivatives for the treatment of man is from 0.01 to 30 mg/kg body weight per day and more particularly 0.1 to 10 mg/kg body weight per day, calculated as the free base, which may be administered as a single or divided dose, for example one to four times per day The dose range for adult human beings is generally from 8 to 2000 mg/day, such as from 20 to 1000 mg/day, preferably 35 to 200 mg/day, calculated as the free base.

The precise amount of the compounds of formula (I) administered to a host, particularly a human patient, will be the responsibility of the attendant physician. However, the dose

employed will depend on a number of factors including the age and sex of the patient, the precise condition being treated and its severity, and the route of administration.

No unacceptable toxicological effects are expected with compounds of the invention when administered in accordance with the invention.

All publications, including but not limited to patents and patent applications, cited in this specification are herein incorporated by reference as if each individual publication were specifically and individually indicated to be incorporated by reference herein as though fully set forth.

The following non-limiting Examples illustrate the preparation of pharmacologically active compounds of the invention.

EXAMPLES

ABBREVIATIONS

Bn (benzyl), Bu, Pr, Me, Et (butyl, propyl, methyl ethyl), DMSO (dimethyl sulfoxide), DCM (dichloromethane), DME (ethylene glycol dimethyl ether), DMF (N,N-dimethylformamide), EDC (1-(3-dimethylaminopropyl)-3-ethylcarbodiimide), EtOAc (ethyl acetate), EtOH (ethanol), HPLC (High pressure liquid chromatography), LCMS (Liquid chromatography/Mass spectroscopy), MDAP (Mass Directed Purification), MeOH (methanol), NMR (Nuclear Magnetic Resonance (spectrum)), Ph (phenyl), pTSA (para-toluene sulphonic acid), SPE (Solid Phase Extraction), TBAF (tetrabutylammonium fluoride), THF (tetrahydrofuran), s, d, t, q, m, br (singlet, doublet, triplet, quartet, multiplet, broad.)

LCMS

- Column: 3.3cm x 4.6mm ID, 3um ABZ+PLUS
- Flow Rate: 3ml/min
- Injection Volume: 5µl
- Temp: RT
- UV Detection Range: 215 to 330nm
-

Solvents: A: 0.1% Formic Acid + 10mMolar Ammonium Acetate.
B: 95% Acetonitrile + 0.05% Formic Acid

Gradient: Time	A%	B%
0.00	100	0
0.70	100	0
4.20	0	100
5.30	0	100
5.50	100	0

MASS DIRECTED AUTOPREPARATION

Hardware:
Waters 600 gradient pump
Waters 2767 inject/collector
Waters Reagent Manager
Micromass ZMD mass spectrometer
Gilson Aspec - waste collector
Gilson 115 post-fraction UV detector

Software :
Micromass MassLynx version 4.0

Column
The column used is typically a Supelco LCABZ++ column whose dimensions are 20mm internal diameter by 100mm in length. The stationary phase particle size is 5µm.
Solvents:
A:. Aqueous solvent = Water + 0.1% Formic Acid
B: Organic solvent = MeCN: Water 95:5 +0.05% Formic Acid
Make up solvent = MeOH: Water 80:20 +50mMol Ammonium Acetate
Needle rinse solvent = MeOH: Water: DMSO 80:10:10

The method used depends on the analytical retention time of the compound of interest. 15-minute runtime, which comprises a 10-minute gradient followed by a 5-minute column flush and re-equilibration step.
MDP 1.5-2.2 = 0-30%B
MDP 2.0-2.8 = 5-30% B
MDP 2.5-3.0 = 15-55%B
MDP 2.8-4.0 = 30-80% B
MDP 3.8-5.5 = 50-90% B
Flow rate:
flow rate 20ml/min.

PREPARATION OF INTERMEDIATES

1-[(Phenylmethyl)oxy]-4-(trifluoromethyl)benzene

A solution of 4-(trifluoromethyl)phenol (8.55g, 52.78mmol) in acetone (200ml) was treated with benzyl bromide (9.87g, 6.86ml, 58.05mmol) and potassium carbonate (10.94g, 79.16mmol). The mixture was stirred and heated to reflux under nitrogen for 3h. After cooling, diethyl ether (400ml) and water (400ml) were added and the aqueous phase re-extracted with diethyl ether (100ml). The combined organic layers were washed with water, dried ($MgSO_4$) and the solvent removed *in vacuo* to leave the title compound as a white solid. (12.71g, 95%)
^1H NMR ($CDCl_3$) δ: 5.11 (2H,s), 7.03 (2H, d), 7.34-7.44 (5H, m), 7.55 (2H, d).

2-Iodo-1-[(phenylmethyl)oxy]-4-(trifluoromethyl)benzene

A solution of 1-[(phenylmethyl)oxy]-4-(trifluoromethyl)benzene (12.71g, 50.4mmol) in acetonitrile (300ml) was stirred under nitrogen and 1-(chloromethyl)-4-fluoro-1,4-diazoniabicyclo[2.2.2]octane bis(tetrafluoroborate) (17.75g, 50.4mmol) and iodine (6.4g, 25.2mmol) added. The mixture was stirred at room temperature for 88h. The solvent was evaporated and the residue partitioned between ethyl acetate (400ml) and water (400ml). The organic layer was washed with water, dried ($MgSO_4$) and evaporated to an orange oil

which was purified by flash chromatography (silica gel, 5% ethyl acetate: isohexane) to give the title compound as an orange oil (15.07g, 79%)
^{1}H NMR ($CDCl_3$) δ: 5.21 (2H, s), 6.89 (1H, d J), 7.32-7.55 (6H, m), 8.04 (1H, d).

1-Chloro-5-iodo-2-methyl-4-(methyloxy)benzene

A mixture of 1-chloro-5-iodo-2-methyl-4-(methyloxy)benzene (5.0g, 32 mmol), 1-(chloromethyl)-4-fluoro-1,4-diazoniabicyclo[2.2.2]octane bis(tetrafluoroborate) (11.3g, 32mmol), and iodine (4.06g, 16mmol) in dry acetonitrile (100ml) was stirred at room temperature for 6 hours. The solvent was evaporated at < 30°C. The residue was partitioned between ethyl acetate (50ml) and water (50ml). The organic phase was dried ($MgSO_4$) and evaporated to leave the title compound as a yellow gum (9.0g).
^{1}H NMR ($CDCl_3$) δ: 2.31(3H,s), 3.83(3H,s), 6.65(1H, s), 7.68(1H, s).

Ethyl 5-iodo-2-methylbenzoate

A solution of 5-amino-2-methylbenzoic acid ethyl ester (500mg, 2.8mmol) and iodine (425mg, 1.68mmol) in toluene (20ml) was cooled to 0°C and treated with t-butyl nitrite (303mg, 2.94mmol). The reaction mixture was stirred at 0°C for 1 hour then at room temperature for 72 hours. The reaction mixture was washed with 10% aqueous sodium thiosulphate (20ml),and brine (20ml), dried ($MgSO_4$) and evaporated. Flash chromatography [silica, iso-hexane/EtOAc, 9:1] gave ethyl 5-iodo-2-methylbenzoate as a brown oil (510mg).
^{1}H NMR ($CDCl_3$) δ: 1.39(3H, t), 2.53(3H, s), 4.36(2H, q), 6.97(1H, d), 7.37(1H, d), 8.20(1H, s).

Ethyl 2-fluoro-5-iodobenzoate

Ethyl 2-fluoro-5-aminobenzoate (6.5g, 35.48mmol) was stirred in 5N hydrochloric acid (60ml) and cooled to 0°C. Sodium nitrite (2.7g, 39.03mmol) in water (5ml) was added at 0-5°C. The resulting mixture was added to a solution of potassium iodide (7.07g, 42.58mmol) in water (50ml) over 5 minutes. The reaction was stirred at room temperature for 1 hour, then extracted with diethyl ether. The organic solution was washed with water and 5% sodium thiosulphate solution, dried ($MgSO_4$) and evaporated. The residue was purified by flash chromatography, eluting with 5% ethyl acetate/isohexane to give the title compound as a colourless oil (7.8g).
^{1}H NMR ($CDCl_3$) δ: 1.40(3H, t), 4.39(2H, q), 6.91(1H, dd), 7.79(1H, td), 8.22(1H, dd).

Ethyl 3-fluoro-5-nitrobenzoate

5-Fluoro-3-nitrobenzoic acid (4.8g, 25.92mmol) was dissolved in ethanol (50ml) and sulphuric acid (0.5ml) added carefully. The mixture was heated to reflux for 16 hours. The

solvent was evaporated and the residue dissolved in ethyl acetate and washed with water, 5% sodium bicarbonate solution and brine, dried ($MgSO_4$) and evaporated. The residue was purified by flash chromatography, eluting with 10% ethyl acetate/isohexane to give the title compund as a yellow oil (2.04g)
^1H NMR ($CDCl_3$) δ: 1.44(3H, t), 4.46(2H, q), 8.07-8.14(2H, m), 8.69(1H, s).

Ethyl 3-amino-5-fluorobenzoate

Ethyl 3-fluoro-5-nitrobenzoate (5.0g, 23.46mmol) was dissolved in ethanol (150ml) and tin(II)chloride (44.24g, 0.234mol) added portionwise with stirring. The mixture was stirred at 80°C for 1 hour. The solvent was evaporated and the residue partitioned between ethyl acetate and 2M sodium hydroxide solution. The resulting glutinous mixture was slowly filtered through a Kieselguhr bed, which was washed copiously with ethyl acetate. The organic phase was washed with water, dried ($MgSO_4$) and evaporated to give the title compound as a cream solid (3.98g).
^1H NMR ($CDCl_3$) δ: 1.38(3H, t), 3.94(2H, br s), 4.35(2H, q), 6.53(1H, dd), 7.08(1H, dd), 7.14(1H, d).

Ethyl 3-fluoro-5-iodobenzoate

Ethyl 3-fluoro-5-aminobenzoate (3.98g, 21.73mmol) was stirred in 5N hydrochloric acid (45ml) and cooled to 0°C. Sodium nitrite (1.65g, 23.91mmol) in water (2ml) was added at 0-5°C. The resulting mixture was added dropwise to a solution of potassium iodide (4.33g, 26.09mmol) in water (30ml) over 20 minutes. The reaction was stirred at room temperature for 1 hour, then extracted with diethyl ether (x2). The organic solution was washed with water and 5% sodium thiosulphate solution, dried ($MgSO_4$) and evaporated to give the title compound as an orange oil (5.0g).
^1H NMR ($CDCl_3$) δ: 1.40(3H, t), 4.39(2H, q), 7.62(1H, dd), 7.69(1H, td), 8.17(1H, s).

Ethyl 3-amino-5-nitrobenzoate

3-Amino-5-nitrobenzoic acid (10.0g, 54.9mmol) was dissolved in ethanol (100ml) and treated with conc. sulphuric acid (5ml). The mixture was heated at reflux overnight. After cooling the ethanol was removed in vacuo and the residue was dissolved in diethyl ether. The solution was basified with saturated aqueous sodium bicarbonate and the layers separated. The aqueous layer was further extracted with diethyl ether (x3) and the combined organic extracts were dried (Na_2SO_4) and concentrated in vacuo to give the ester (6.5g).
^1H NMR ($CDCl_3$) δ: 1.41(3H, t), 4.15(2H, br s), 4.40(2H,q), 7.60-7.68(2H, m), 8.20(1H, s).

Ethyl 3-iodo-5-nitrobenzoate

Ethyl 3-amino-5-nitrobenzoate (6.5g, 30.9mmol) was suspended in 5M aqueous HCl (50ml), cooled to 0°C and sodium nitrite (2.34g, 33.9mmol) in water (4ml) was added slowly. The resulting solution of the diazonium salt was added slowly to a solution of potassium iodide (6.16g, 37.1mmol) in water (40ml), and the resulting mixture was stirred at room temperature for 1 hour. The mixture was extracted with diethyl ether, and the extract was washed with water and aqueous sodium thiosulphate solution, dried (Na_2SO_4) and concentrated *in vacuo*. The residue was purified by flash chromatography on silica (gradient elution, 10-20% ethyl acetate/cyclohexane) to give the title compound (5.46g).
^{1}H NMR ($CDCl_3$) δ: 1.44(3H, t), 4.46(2H,q), 8.68(1H, t), 8.73(1H, t), 8.81(1H, t).

Ethyl 3-amino-5-iodobenzoate

Ethyl 3-iodo-5-nitrobenzoate (4.45g, 13.9mmol) was dissolved in ethanol and tin (II) chloride (27g, 146mmol) was added. The mixture was heated to reflux for 2 hours. After cooling, the reaction was concentrated *in vacuo*. The residue was partitioned between ethyl acetate and aqueous sodium hydroxide solution, and the aqueous extracted with further ethyl acetate. The combined extracts were washed with water, dried (Na_2SO_4) and concentrated in vacuo to give the title compound as a yellow oil which slowly crystallised (3.56g). LC/MS Rt=3.23min [MH^+] 292.
^{1}H NMR ($CDCl_3$) δ: 1.38(3H, t), 3.80 (2H, br s), 4.45(2H, q), 7.20(1H, t), 7.30(1H, t), 7.74(1H, t).

3-Bromo-5-chloro-2(1*H*)-pyridinone

5-Chloro-2-pyridinol (5.18g, 40mmol) was dissolved in glacial acetic acid(50ml) and bromine (7.51g, 2.41ml, 47mmol) added dropwise. The mixture was stirred at room temperature for 48 hours. Ethyl acetate and water were added and the organic layer washed with water (x3), dried ($MgSO_4$) and evaporated. The residue was triturated with diethyl ether and the buff solid filtered and dried (5.59g).
^{1}H NMR ($CDCl_3$) δ: 7.52(1H, d), 7.87(1H, d).

3-Bromo-5-chloro-2-[(phenylmethyl)oxy]pyridine

3-Bromo-5-chloro-2-pyridinol (7.0g, 33.6mmol) was stirred in toluene (160ml) and silver carbonate (10.23g, 36.9mmol) added, followed by benzyl bromide (6.32g, 4.39ml, 36.9mmol). The mixture was heated to reflux for 1 hour. After cooling, the mixture was filtered, washed with water (x2), dried ($MgSO_4$) and evaporated. The residue was triturated with isohexane and the pale yellow solid filtered and dried. (8.36g).
^{1}H NMR ($CDCl_3$) δ: 5.43(2H, s), 7.32-7.48(5H, m), 7.82(1H, d), 8.04(1H, d).

5-Chloro-3-iodo-2-[(phenylmethyl)oxy]pyridine

5-Chloro-3-iodo-2(1*H*)-pyridinone (6.69g, 26.18mmol) was dissolved in toluene (125ml) and silver carbonate (7.97g, 28.8mmol) added, followed by benzyl bromide (3.43ml, 28.8mmol). The mixture was stirred and heated to reflux for 2 hours. The mixture was cooled, filtered through a Kieselguhr pad and the solvent evaporated. The residue was triturated with isohexane containing a trace of diethyl ether and the title compound filtered and dried *in vacuo* (6.8g).
^{1}H NMR ($CDCl_3$) δ: 5.41(2H, s), 7.32-7.49(5H, m), 8.03(1H, d), 8.06(1H, d).

3-Iodo-2-[(phenylmethyl)oxy]-5-(trifluoromethyl)pyridine

The title compound was prepared in a similar manner to 5-chloro-3-iodo-2-[(phenylmethyl)oxy]pyridine using 3-iodo-5-(trifluoromethyl)-2(1*H*)-pyridinone.
^{1}H NMR ($CDCl_3$) δ: 5.49(2H, s), 7.33-7.50(5H, m), 8.23(1H, d), 8.39(1H, d).

Ethyl 3-bromo-5-fluorobenzoate

3-Bromo-5-fluorobenzoic acid (ex. Fluorochem) (6.0g, 22.8mmol) was dissolved in ethanol (50ml) and treated with conc. sulphuric acid (2.5ml). The mixture was heated at reflux overnight. After cooling the ethanol was removed *in vacuo* and the residue was dissolved in diethyl ether. The solution was basified with saturated aqueous sodium bicarbonate, and the layers separated. The aqueous layer was further extracted with diethyl ether (x3); and the combined organic extracts were dried (Na_2SO_4) and concentrated *in vacuo* to give the ester (6.17g).
^{1}H NMR ($CDCl_3$) δ: 1.41 (3H, t), 4.40 (2H,q), 7.44 (1H, dt), 7.68 (1H, ddd), 7.99(1H, s).

Ethyl 3-amino-5-nitrobenzoate

3-Amino-5-nitrobenzoic acid (ex Lancaster) (10.0g, 54.9mmol) was dissolved in ethanol (100ml) and treated with conc. sulphuric acid (5ml). The mixture was heated at reflux overnight. After cooling the ethanol was removed *in vacuo* and the residue was dissolved in diethyl ether. The solution was basified with saturated aqueous sodium bicarbonate, and the layers separated. The aqueous layer was further extracted with diethyl ether (x3), and the combined organic extracts were dried (Na_2SO_4) and concentrated *in vacuo* to give the ester (6.5g).
^{1}H NMR ($CDCl_3$) δ: 1.41(3H, t), 4.15(2H, br s), 4.40(2H,q), 7.60-7.68(2H, m), 8.20(1H, s).

Ethyl 3-iodo-5-nitrobenzoate

Ethyl 3-amino-5-nitrobenzoate (6.5g, 30.9mmol) was suspended in 5M aqueous HCl (50ml), cooled to 0°C, and treated with aqueous sodium nitrite (2.34g 33.9mmol in 4ml water) added slowly. The resulting solution of the diazonium salt was added slowly to a solution of potassium iodide (6.16g, 37.1mmol) in water (40ml), and the resulting mixture was stirred at room temperature for 1 hour. The mixture was extracted with diethyl ether,

and the extract was washed with water, aqueous sodium thiosulphate solution, dried (Na_2SO_4) and concentrated *in vacuo*. The residue was purified by flash chromatography on silica (gradient elution, 10-20% ethyl acetate/cyclohexane) to give the title compound (5.46g).
^{1}H NMR ($CDCl_3$) δ: 1.44(3H, t), 4.46(2H,q), 8.68(1H, t), 8.73(1H, t), 8.81(1H, t).

Ethyl 3-amino-5-iodobenzoate

Ethyl 3-iodo-5-nitrobenzoate (4.45g, 13.9mmol) was dissolved in ethanol and tin (II) chloride (27g, 146mmol) was added. The mixture was heated to reflux for 2 hours, by which time LC/MS analysis showed that reaction was complete. After cooling, the reaction was concentrated *in vacuo*. The residue was partitioned between ethyl acetate and aqueous sodium hydroxide solution, and the aqueous extratced with further ethyl acetate. The combined extracts were washed with water, dried (Na_2SO_4) and concentrated *in vacuo* to give the title compound as a yellow oil which slowly crystallised (3.56g).
^{1}H NMR ($CDCl_3$) δ: 1.38(3H, t), 3.80 (2H, br s), 4.45(2H, q), 7.20(1H, t), 7.30(1H, t), 7.74(1H, t). LC/MS Rt=3.23min [MH^+] 292.

Ethyl 3,6-dichloro-2-pyridinecarboxylate

3,6-Dichloro-2-pyridinecarboxylic acid (530mg, 2.76mmol) was dissolved in a mixture of ethanol (20ml) and sulphuric acid (0.25ml) and refluxed for 2 hours then left at room temperature for 3 days. The resulting solution was evaporated and the residue dissolved in diethyl ether/water and basified with potassium carbonate. The organic layer was dried (magnesium sulphate) and evaporated to give a colourless oil (602mg).
LC/MS t=2.56, [MH+] 220.3

Ethyl 3-methyl-2-pyridinecarboxylate 1-oxide

A solution of ethyl 3-methyl-2-pyridinecarboxylate (12.1g, 73mmol) and 3-chloroperbenzoic acid (28g, 50-55%, 80mmol) in dichloromethane (200ml) was left at room temperature for 16 hours then washed with sodium thiosulphate solution and sodium bicarbonate solution. The organic solution was dried (magnesium sulphate) and evaporated to give a light coloured oil (12.2g). LC/MS Rt=1.39, [MH+] 182.3

Ethyl 6-chloro-3-methyl-2-pyridinecarboxylate

Ethyl 3-methyl-2-pyridinecarboxylate 1-oxide (12.1g, 66.85mmol) was added in portions with water bath cooling to phosphorus oxychloride (50ml) and the resulting mixture stirred for 30 minutes and evaporated to dryness. The residue was dissolved in diethyl ether/water and basified with 2M sodium hydroxide solution. The organic layer was separated, dried (magnesium sulphate), evaporated and purified by chromatography on silica eluting with ethyl acetate/iso-hexane (1:9) to give a colourless oil (2.4g).

LC/MS Rt=2.52, [MH+] 200.3, 202.3
^{1}H NMR ($CDCl_3$) δ: 1.43 (3H, t), 2.54 (3H, s), 4.44 (2H, q), 7.35 (1H, d), 7.57 (1H, d).

Methyl 5-chloro-2-ethyl-3-pyridinecarboxylate

Potassium-tert-butoxide (1.176 g, 10.5 mmol) was added slowly to a stirring solution of methyl 3-oxopentanoate (1.30 g, 10 mmol) in tetrahydrofuran (33 ml) and stirred for 45 minutes before adding 2-chloro-1,3-bis(dimethylamino)trimethinium hexafluorophosphate (4.6 g, 15.00 mmol) and 1,4-diazabicyclo(2.2.2) octane (1.12 g, 10 mmol) and stirring at 45°C for 3 hours. Ammonium acetate (1.54 g, 20 mmols) was added and the reaction mixture was refluxed for 6 hours. The reaction mixture was cooled to room temperature and diluted with diethyl ether and water. The ether layer was separated, dried over magnesium sulphate and evaporated to dryness to give the title compound as a yellow oil. 1.24 g, 62%. LC/MS: Rt = 2.65 min, [M+H] 200.

Methyl 5-bromo-2-(trifluoromethyl)-3-pyridinecarboxylate

(Trimethylsilyl)diazomethane (2M solution in hexanes, 5ml, 10mmol) was added to a solution of 5-bromo-2-(trifluoromethyl)-3-pyridinecarboxylic acid (Eur. J. Org. Chem. 2002, 327-330) (2.05g, 7.59mmol) in tetrahydrofuran (10ml). The resulting solution was evaporated to dryness and the residue purified by chromatography on silica eluting with ethyl acetate/iso-hexane (1:19) to give 950mg of pale coloured oil.
^{1}H NMR ($CDCl_3$) δ: 3.84 (3H, s), 8.12 (1H, d), 8.71 (1H, d).

(2-Bromo-1-cyclopenten-1-yl)boronic acid

1,2-Dibromocyclopentene (10.1 g, 0.044 mol) was dissolved in 100 mL of tetrahydrofuran , cooled to –78°C and n-butyllithium (1.6 M solution in hexanes; 28 mL, 0.044 mol), was added dropwise over 20 minutes under nitrogen. The mixture was stirred at –78°C for 20 minutes, then triisopropylborate (20.8 mL, 0.089 mol) was added dropwise. The cooling bath was then removed and the reaction mixture was allowed to reach room temperature. The reaction mixture was then quenched with 1M HCl (40 mL) and stirred vigorously at room temperature for 15 minutes. The organic layer was separated, dried over magnesium sulphate and evaporated down. The residue was triturated with dichloromethane to yield the title compound as a white solid (2.2g, 26%).
^{1}H NMR ($CDCl_3$) δ: 1.92-1.98 (2H, m), 2.50-2.55 (2H, m), 2.73-2.78(2H, m), 5.02 (2H, s).

[2-(Methyloxy)-5-(trifluoromethyl)phenyl]boronic acid

2-Bromo-1-methoxy-4-(trifluoromethyl)benzene (20g, 78mmol) was dissolved in dry Et_2O (300ml) and cooled to –70°C, n-butyllithium (1.6M solution in hexanes; 53.4ml, 86mmol) was added slowly keeping the temperature at about -70°C and the reaction stirred for 30

minutes. Tri-isopropyl borate (36.2ml, 0.16mol) was added slowly keeping the temperature at about -70°C and the reaction allowed to warm to RT and stirred under nitrogen for 16 hours. 2N HCl (300ml) was added and the reaction stirred vigorously for 3 hours. The reaction was diluted with EtOAc and the organics separated, the aqueous washed with 3 x EtOAc. The combined organics were then washed with brine, dried over MgSO4, filtered and concentrated in vacuo to yield a yellow oil, this was triturated in *iso*-hexane to yield a white solid (14.6g, 85%). LC/MS Rt = 2.57.

{5-Chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}boronic acid

a) 3-Bromo-5-chloro-2-[(phenylmethyl)oxy]pyridine (3.65g, 12.21mmol) was dissolved in diethyl ether (80ml) and added dropwise to a stirring solution of 1.6M n-butyllithium in hexanes (9.16ml, 14.6mmol) in diethyl ether (20ml) at -78°C under nitrogen over 30 minutes. The mixture was stirred at -78°C for 1 hour. Triisopropyl borate (3.37ml, 14.6mmol) in diethyl ether (10ml) was added dropwise over 10 minutes at -78°C. The reaction was allowed to warm to room temperature then stirred for 1 hour. 2M sodium hydroxide solution (100ml) was added and the mixture stirred for 15 minutes. The layers were separated and the organic layer re-extracted with 2M sodium hydroxide solution (50ml). The combined aqueous layers were acidified to pH6 with 2M hydrochloric acid solution at <10°C and extracted with ethyl acetate (x2). The combined organic phases were washed with water, dried ($MgSO_4$) and evaporated to a white solid (1.83g).
^{1}H NMR ($CDCl_3$) δ: 5.45(2H, s), 5.71(2H, s), 7.36-7.45(5H, m), 8.09(1H, d), 8.20(1H, d).
b) 5-Chloro-3-iodo-2-[(phenylmethyl)oxy]pyridine (3.35g, 9.7mmol) was dissolved in tetrahydrofuran (50ml) under nitrogen and cooled to -40°C. 2M isopropyl magnesium chloride solution in diethyl ether (9.7ml, 19.4mmol) was added dropwise at -40°C and the mixture stirred at -40°C for 15 minutes, then cooled to -78°C. Trimethyl borate (2.02g, 2.23ml, 19.4mmol) was added dropwise at -78°C and the reaction was stirred and allowed to warm to room temperature over 2 hours. 2M sodium hydroxide solution (50ml) was added and the mixture stirred for 15 minutes. The organic layer was re-extracted with 2M sodium hydroxide solution (20ml) and the combined aqueous layers acidified with glacial acetic acid and extracted with diethyl ether (x2). The combined organic phases were washed with water, dried ($MgSO_4$) and evaporated. The residue was triturated with isohexane, filtered and dried *in vacuo* to give the title compound (2.13g).
^{1}H NMR ($CDCl_3$) δ: 5.45(2H, s), 5.71(2H, s), 7.36-7.45(5H, m), 8.09(1H, d), 8.20(1H, d).

[5-Bromo-2-(methyloxy)-3-pyridinyl]boronic acid

The title compound was prepared in a similar manner to {5-chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}boronic acid using 3,5-dibromo-2-(methyloxy)pyridine.
^{1}H NMR ($DMSOd_6$) δ: 3.85(3H, s), 7.92(1H, d), 8.11(2H, s), 8.29(1H, d).

[2-[(Phenylmethyl)oxy]-5-(trifluoromethyl)-3-pyridinyl]boronic acid

3-Iodo-2-(phenylmethoxy)-5-(trifluoromethyl)pyridine (15.0g, 39.5mmol) was dissolved in tetrahydrofuran (90mL) under nitrogen and cooled to -40°C. Isopropyl magnesium chloride solution in diethyl ether (2.0M, 39.5mL, 79mmol) was added dropwise at -40°C and the mixture stirred at -40°C for 15 minutes, then cooled to -78°C. Trimethyl borate (8.9mL, 8.25g, 79.4mmol) was added dropwise at -78°C and the reaction was stirred and allowed to warm to room temperature over 18 hours. 2M aqueous sodium hydroxide solution was added and the layers were separated. The organic phase was dried ($MgSO_4$) and concentrated *in vacuo*. The residue was triturated with dichloromethane, and the solid material was collected by filtration and dried *in vacuo* to give the title compound (10.53g). LC/MS Rt=3.45min [MH^+] 298.

2-(2-Bromo-1-cyclopenten-1-yl)-4-chloro-1-(methyloxy)benzene

4-Chloro-2-iodoanisole (16.8g, 0.062mol), (2-bromo-1-cyclopenten-1-yl)boronic acid (12g, 0.062 mol), potassium carbonate (35 g, 0.25 mol) and tetrakis(triphenylphosphine)palladium(0) (3.6g, 0.003 mol) were dissolved in toluene-ethanol (1:1 300 mL) and stirred at 90°C, under nitrogen, for 2hrs. Upon cooling, the reaction mixture was poured into water and extracted with ethyl acetate (150mL x 3). The organic layers were dried ($MgSO_4$), filtered and concentrated. The residue was purified by flash chromatography using 2% ethyl acetate/iso-hexane to give a clear oil that was recrystallized from iso-hexane at 0-4°C to give the required product as a white solid (7.55g).
^{1}H NMR ($CDCl_3$) δ: 12.01-2.09(2H, m), 2.65-2.69(2H, m), 2.77-2.81(2H, m), 3.79 (3H, s), 6.79-6.82(1H, m), 7.2-7.25 (2H, m).

The following intermediates were prepared by a similar route to 2-(2-bromo-1-cyclopenten-1-yl)-4-chloro-1-(methoxy)benzene from the appropriate intermediates.

Name	Data
1-(2-Bromo-1-cyclopenten-1-yl)-5-chloro-4-methyl-2-(methyloxy)benzene	^{1}H NMR: $CDCl_3$ 2.00-2.08(2H, m), 2.34(3H, s), 2.65(2H, t), 2.78(2H, t), 3.78(3H, s), 6.74(1H, s), 7.21(1H, s).
3-(2-Bromo-1-cyclopenten-1-yl)-2-(methyloxy)pyridine	^{1}H NMR: ($CDCl_3$) δ: 2.03-2.11(2H, m), 2.69-2.74(2H, m), 2.78-2.83(2H, m), 3.95(3H, s), 6.90(1H, dd), 7.58(1H, dd), 8.12(1H, dd).
2-(2-Bromo-1-cyclopenten-1-yl)-1-[(phenylmethyl)oxy]-4-(trifluoromethyl)benzene	^{1}H NMR: $CDCl_3$ 2.02-2.09(2H, m), 2.70-2.75(2H, t), 2.78-2.82(2H, t), 5.14(2H, s), 6.98(1H, d), 7.33-7.40(5H, m), 7.48(1H,dd), 7.54(1H,d).

2-(2-Bromo-1-cyclopenten-1-yl)-4-chloro-1-[(phenylmethyl)oxy]benzene	^{1}H NMR: $CDCl_3$ 1.99-2.07(2H, m), 2.67-2.72(2H, t), 2.76-2.81(2H, t), 5.06(2H, s), 6.84(1H, d), 7.18(1H, dd), 7.24-7.38(6H, m).

2-(2-Bromo-1-cyclopenten-1-yl)-1-(methyloxy)-4-(trifluoromethyl)benzene

[2-Methoxy-5-(trifluoromethyl)phenyl]boronic acid (20g, 90.9mmol), 1,2-dibromocyclopentene (32.5ml, 0.27mol), potassium carbonate (62.8g, 0.45mol) and tetrakis(triphenylphosphine)palladium(0) were refluxed in 1:1 ethanol/toluene (900ml), in the dark, under a nitrogen atmosphere, for 2 hours. After cooling the reaction was filtered over celite and the solvent removed in vacuo, the residue was taken up in ethyl acetate and washed with water and brine, dried over MgSO4, filtered and concentrated in vacuo to yield a dark oil. This was purified by column chromatography eluting with isohexane. This yielded the title compound as a yellow oil (26.7g, 61%). LC/MS Rt = 3.88.

2-(2-Bromo-1-cyclopenten-1-yl)-4-fluoro-1-(methyloxy)benzene

Procedure as for 2-(2-bromo-1-cyclopenten-1-yl)-1-(methyloxy)-4-(trifluoromethyl)benzene starting from [5-fluoro-2-(methyloxy)phenyl]boronic acid. LC/MS Rt = 3.70, [MH]$^+$ 270.

{2-[2-(Methyloxy)-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}boronic acid

2-(2-Bromo-1-cyclopenten-1-yl)-1-(methyloxy)-4-(trifluoromethyl)benzene (26g, 81.3mmol) was dissolved in dry THF (350ml) and the solution cooled to –70°C. n-butyllithium (1.6M solution in hexanes; 101.6ml, 0.16mol) was added slowly keeping the temperature below –65°C and the reaction allowed to stir for 45 minutes. Tri-isopropyl borate (37.5ml, 0.16mol) was added slowly keeping the temperature below –60°C and the cooling removed and the reaction stirred under nitrogen at RT for a further 15 hours. 2N HCl (300ml) was added and the reaction stirred at RT for a further 2 hours. The reaction was diluted with ethyl acetate and the organics separated, the aqueous washed with ethyl acetate (x3). The combined organics were then washed with brine, dried over MgSO4, filtered and concentrated in vacuo to yield a yellow oil. This was purified by column chromatography on a 75L Biotage column eluting in 40% ethyl acetate/isohexane. This yielded the title compound as a white solid. LC/MS Rt = 2.96.

The following intermediates were prepared by a similar route to {2-[2-(methyloxy)-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}boronic acid from the appropriate intermediates.

Name	Data

{2-[2-(Methyloxy)phenyl]-1-cyclopenten-1-yl}boronic acid	LC/MS Rt = 3.69 min. [2MH$^+$] 417.2
{2-[5-Fluoro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}boronic acid	LC/MS Rt = 2.52 min.
{2-[5-Chloro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}boronic acid	^{1}H NMR ($CDCl_3$) δ: 1.91-1.98 (2H, m), 2.66-2.73 (4H, m),3.80 (3H, s), 4.30 (2H, s), 6.85 (1H, s), 7.16 (1H, s), 7.21 (1H, dd).
{2-[2-[(Phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl} boronic acid	LC/MS: Rt = 3.44 min, [M+H_2O] 380, [2M] 724
{2-[5-Chloro-4-methyl-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}boronic acid	^{1}H NMR ($CDCl_3$) δ: 1.90-1.97(2H, m), 2.36(3H, s), 2.65-2.71(4H, m), 3.79(3H, s), 4.41(2H, s), 6.78(1H, s), 7.14(1H, s).
(2-{5-Chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)boronic acid	LC/MS: Rt = 3.39 min, [2MH$^+$] 637

5-(2-Bromo-1-cyclopenten-1-yl)-N-(1,1-dimethylethyl)-3-pyridazinecarboxamide

(2-Bromo-1-cyclopenten-1-yl)boronic acid (0.6g, 3.2mmol), N-(1,1-dimethylethyl)-5-iodo-3-pyridazinecarboxamide (1.0g, 3.2mmol), tetrakis(triphenylphosphine)palladium(0) (200mg, 0.172mmol) and potassium carbonate (1.1g, 8mmol) in toluene/ethanol (1:1, 10ml) were refluxed overnight under nitogen in the dark. The reaction mixture was then filtered through celite, and chromatographed with diethyl ether/iso-hexane gradient giving (0.78g, 71%yield).
LC/MS Rt=3.13min [MH$^+$] 326, 327

Ethyl 6-(2-bromo-1-cyclopenten-1-yl)-3-chloro-2-pyridinecarboxylate

A mixture of ethyl 3,6-dichloro-2-pyridinecarboxylate (220mg, 1mmol), (2-bromo-1-cyclopenten-1-yl)boronic acid (191mg, 1mmol), potassium carbonate (552mg, 4mmol) and tetrakis(triphenylphosphine)palladium(0) (58mg, 0.05mmol) in 1:1 ethanol/toluene (4ml) was stirred and heated at 90^{0}C under nitrogen for 2 hours. after cooling the mixture was dissolved in diethyl ether/water and the organic phase dried (magnesium sulphate) evaporated and the residue purified by chromatography on silica eluting with ethyl acetate/iso-hexane (1:19) to give 110mg of colourless oil.
LC/MS t=3.81, [MH+] 332.3.

The following compounds were prepared by a similar route to ethyl 6-(2-bromo-1-cyclopenten-1-yl)-3-chloro-2-pyridinecarboxylate from the appropriate intermediates.

Name	Data
Ethyl 6-(2-bromo-1-cyclopenten-1-yl)-2-pyrazinecarboxylate	LC/MS: Rt = 3.07min. [M+H] = 297, 299.
Ethyl 6-(2-bromo-1-cyclopenten-1-yl)-2-pyridinecarboxylate	LC/MS: Rt = 3.27 min.[M+H] = 296,298.
Ethyl 3-(2-bromo-1-cyclopenten-1-yl)benzoate	Rt = 3.98 min. [MH^+] 295, 297.
Ethyl 5-(2-bromo-1-cyclopenten-1-yl)-2-methylbenzoate	^1H NMR ($CDCl_3$) δ: 1.39(3H, t), 2.01-2.08(2H, m), 2.59(3H, s), 2.77(2H,m), 2.85(2H, m), 4.36(2H, q), 7.24(1H, t), 7.65(1H, d), 8.12(1H, s).
Ethyl 5-(2-bromo-1-cyclopenten-1-yl)-2-fluorobenzoate	Rt = 3.82min. [MH^+] 313, 315.
Ethyl 3-(2-bromo-1-cyclopenten-1-yl)-5-fluorobenzoate	Rt = 3.91min. [MH^+] 313, 315.
Ethyl 3-amino-5-(2-bromocyclopent-1-enyl)benzoate	LC/MS Rt=3.51min [MH^+] 310,312.
Ethyl 2-amino-5-(2-bromo-1-cyclopenten-1-yl)benzoate	^1H NMR ($CDCl_3$) δ: 1.39 (3H, t, J=7Hz), 1.98-2.06 (2H, m), 2.71-2.76 (2H, m), 2.81-2.86 (2H, m) 4.33 (2H, q, J=7Hz), 5.80 (2H, br s), 6.65 (1H, d, J=9Hz), 7.65 (1H, dd, J=9Hz, 2Hz), 8.14 (1H, d, J=2Hz).

Ethyl 5-(2-bromocyclopent-1-enyl)-2-fluorobenzoate

Ethyl 2-fluoro-5-iodobenzoate (4.7g, 16.0mmol), 2-bromo-cyclopent-1-enylboronic acid (3.06g, 16.0mmol), potassium carbonate (15.5g, 112mmol) and $Pd(PPh_3)_4$ (0.925g, 0.8mmol) were dissolved in toluene-ethanol (1:1, 110mL) and stirred at 100°C under nitrogen for 1.5 hours. Upon cooling, the reaction mixture was diluted with diethyl ether, and washed with water. The aqueous layer was extracted with further diethyl ether, and the combined organic extracts were dried ($MgSO_4$), and concentrated *in vacuo*. The residue was purified by flash chromatography on silica (gradient elution, 1-5% ethyl acetate/cyclohexane) to give the required product as a yellow oil (3.84g).
LC/MS Rt=3.80min [MH^+] 313, 315.

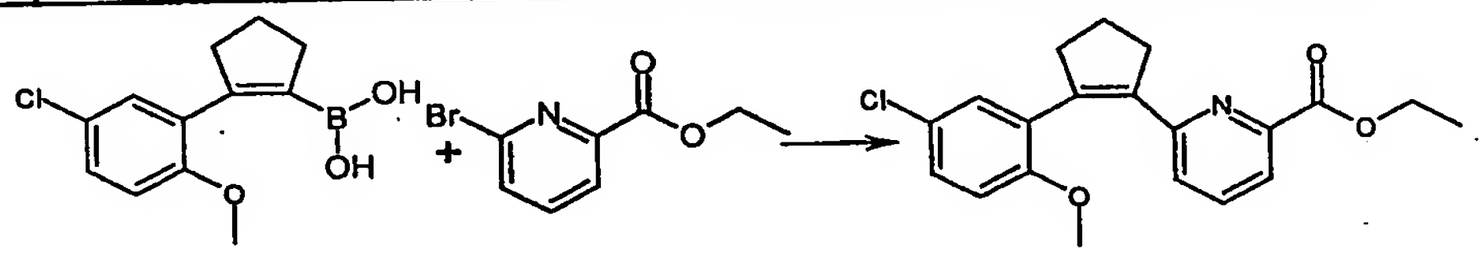
Ethyl 3-(2-bromocyclopent-1-enyl)-5-fluorobenzoate

Ethyl 3-bromo-5-fluorobenzoate (5.17g, 20.9mmol), 2-bromo-cyclopent-1-enylboronic acid (3.99g, 20.9mmol), potassium carbonate (23g, 167mmol) and $Pd(PPh_3)_4$ (1.1g, 1.0mmol) were dissolved in toluene-ethanol (1:1, 150mL) and heated to reflux for 1.5 hours under a nitrogen atmosphere. Upon cooling, the reaction mixture was diluted with diethyl ether, and washed with water. The aqueous layer was extracted with further diethyl ether, and the combined organic extracts were dried (Na_2SO_4), and concentrated *in vacuo*. The residue was purified by flash chromatography on silica (gradient elution, 0-5% ethyl acetate/cyclohexane) to give the required product as a yellow oil (5.93g).
LC/MS Rt=3.93min [MH^+] 313, 315.

Ethyl 3-amino-5-(2-bromocyclopent-1-enyl)benzoate

Ethyl 3-amino-5-iodobenzoate (3.66g, 12.6mmol), 2-bromo-cyclopent-1-enylboronic acid (2.41g, 12.6mmol), potassium carbonate (12.2g, 88.2mmol) and $Pd(PPh_3)_4$ (0.73g, 0.63mmol) were dissolved in toluene-ethanol (1:1, 50mL) and heated to reflux for 1.75 hours under a nitrogen atmosphere. After cooling, the reaction mixture was diluted with diethyl ether, and washed with water. The aqueous layer was extracted with further diethyl ether, and the combined organic extracts were dried (Na_2SO_4), and concentrated *in vacuo*. The residue was purified by flash chromatography on silica (gradient elution, 0-5% ethyl acetate/cyclohexane) to give the required product (4.21g).
LC/MS Rt=3.51min [MH^+] 310,312.

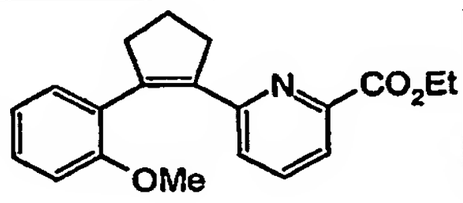
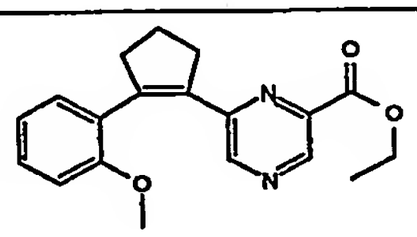
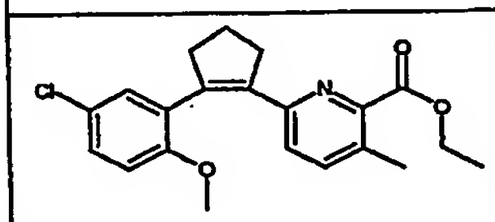
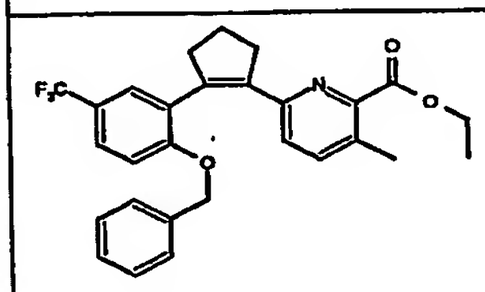
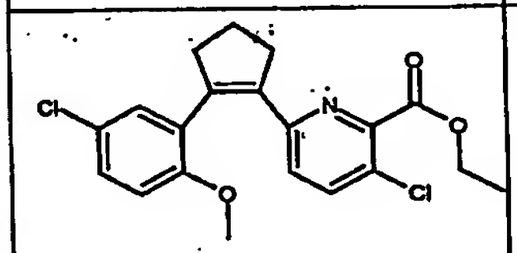
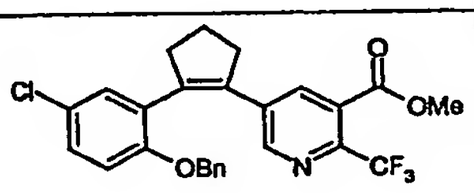
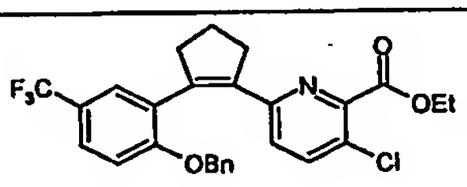
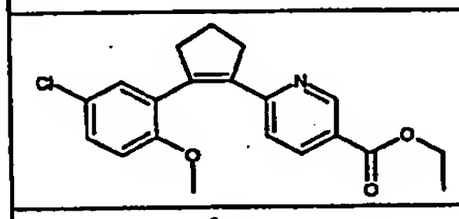
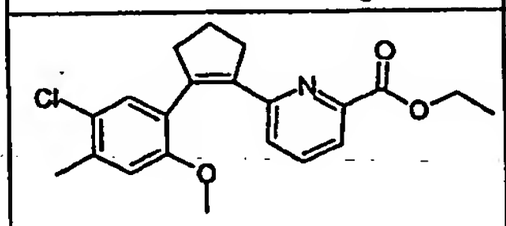
Ethyl 6-{2-[5-chloro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate

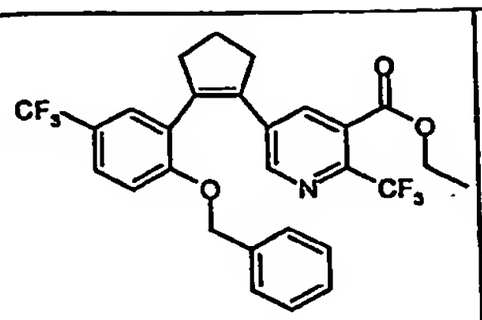
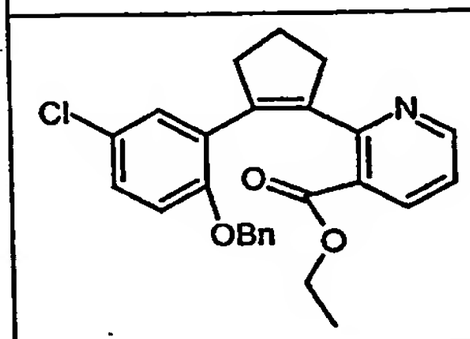


A mixture of ethyl 6-bromo-2-pyridinecarboxylate (4.1g, 17.8 mmol), {2-[5-chloro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}boronic acid (4.1g, 16 mmol), potassium carbonate (11.2g, 81 mmol) and tetrakis(triphenylphosphine)palladium(0) (1.88g, 1.6mmol) was stirred and heated in 1:1 toluene/ethanol (50 ml) at 90°C under nitrogen for 2 hours. After cooling the mixture was diluted with ethyl acetate/water and the organic phase dried (magnesium sulphate), evaporated to dryness and the residue purified by chromatography (12% ethyl acetate in iso-hexane) to yield the title compound as a clear oil (4g).
LC/MS: Rt 3.8 [MH+] 358,361

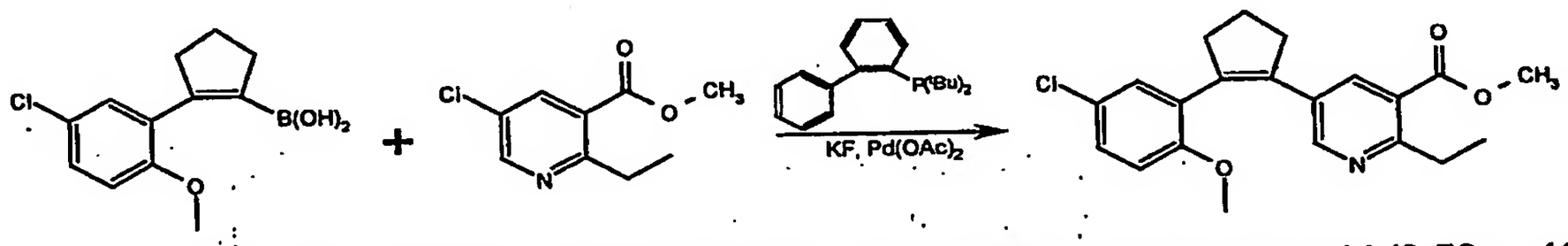
The following copounds were prepared by a similar route to ethyl 6-{2-[5-chloro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate from the appropriate intermediates.

	Name	Data

	Ethyl 6-{2-[2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS: Rt = 3.53 min, [M+H] 324.
	Ethyl 6-{2-[2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylate	LC/MS: Rt = 3.47 min, [M+H] 325.
	Ethyl 6-{2-[5-chloro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylate	LC/MS Rt=3.98, [MH+] 372.4, 374.5
	Ethyl 3-methyl-6-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS: Rt = 4.39 min, [M+H] 482.
	Ethyl 3-chloro-6-{2-[5-chloro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS Rt=3.95, [MH+] 392.4
	Methyl 5-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-(trifluoromethyl)-3-pyridinecarboxylate	LC/MS Rt=4.20, [MH+] 488.4
	Ethyl 3-chloro-6-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS Rt=4.15, [MH+] 502.4, 504.4
	Ethyl 6-{2-[5-chloro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-3-pyridinecarboxylate	LC/MS Rt=3.84, [MH+] 358.3
	Ethyl 6-{2-[5-chloro-4-methyl-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS: Rt = 3.77 min. [M+H] = 372.

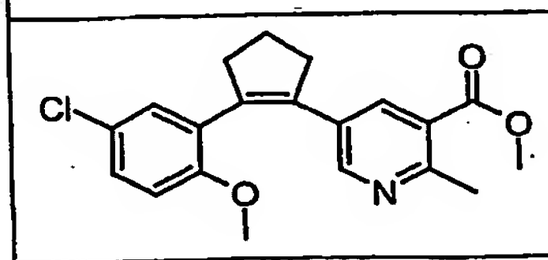
	Ethyl 5-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-(trifluoromethyl)-3-pyridinecarboxylate	LC/MS: Rt = 3.91 min. [M+H] = 536
	Ethyl 2-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-3-pyridinecarboxylate	LC/MS: Rt = 3.89 min. [M+H] = 434, 436

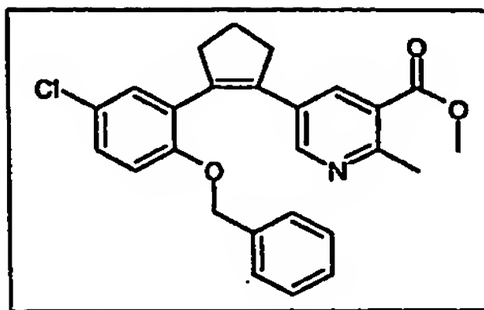
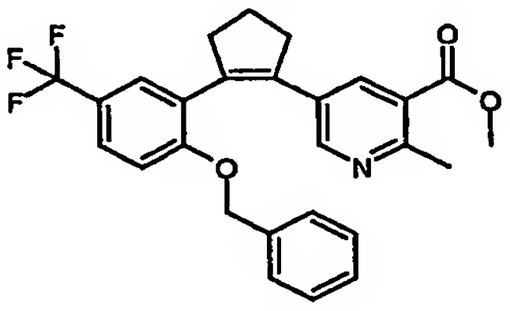
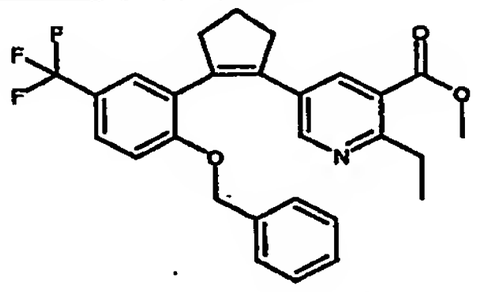
Methyl 5-{2-[5-chloro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-ethyl-3-pyridinecarboxylate



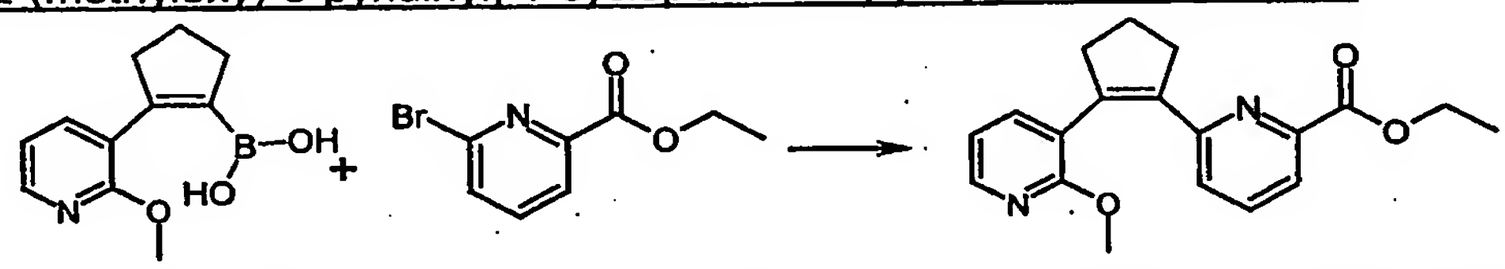
A mixture of {2-[5-chloro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}boronic acid (2.53 g, 10 mmol), methyl 5-chloro-2-ethyl-3-pyridinecarboxylate (1.995 g, 10 mmol), palladium acetate (22 mg, 0.0909 mmol), potassium fluoride on alumina (40%) (4.35 g, 30 mmol) and (di-tert-butylphosphino)biphenyl (60 mg, 0.20 mmol) in anhydrous tetrahydrofuran (25 ml) was heated at 50°C under an atmosphere of nitrogen for 3 hours. The reaction mixture was cooled to room temperature and diluted with diethyl ether and water. The ether layer was separated, dried over magnesium sulphate and evaporated to dryness. The residue was purified using flash chromatography eluting with ethyl acetate/ iso-hexane (15%) to give the title compound as a yellow oil. 1.93 g, 52%.
^{1}H NMR ($CDCl_3$) δ: 1.24 (3H, t), 2.06-2.14 (2H, m), 2.81-2.56 (2H, m), 2.91-2.95 (2H, m), 3.08 (2H, q), 3.63 (3H, s), 3.85 (3H, s), 6.79 (1H, d), 7.00 (1H, d), 7.18 (1H, dd,), 7.91 (1H, d), 8.34 (1H, d). LC/MS: Rt = 3.83 min, [M+H] 372.

The following intermediates were prepared by a similar route to methyl 5-{2-[5-chloro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-ethyl-3-pyridinecarboxylate from the appropriate intermediates.

	Name	Data
	Methyl 5-{2-[5-chloro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylate	LC/MS Rt=3.64, [MH+] 358.4, 360.4

	Methyl 5-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-methyl-3-pyridinecarboxylate	LC/MS Rt=4.06, [MH+] 334.4, 436.4
	Methyl 2-methyl-5-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-pyridinecarboxylate	LC/MS Rt=4.04, [MH+] 468.4
	Methyl 2-ethyl-5-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-pyridinecarboxylate	LC/MS Rt=4.17, [MH+] 482.5

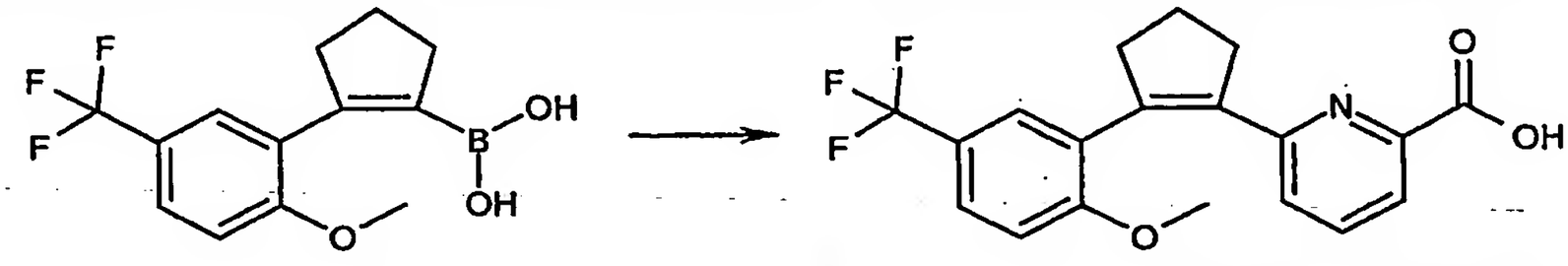
Ethyl 6-{2-[2-(methyloxy)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate



{2-[2-(Methyloxy)-3-pyridinyl]-1-cyclopenten-1-yl}boronic acid (219mg, 1mmol) and ethyl 6-bromo-2-pyridinecarboxylate (230mg, 1mmol) were dissolved in toluene/ethanol (1:1, 10ml) under nitrogen and tetrakis(triphenylphosphine)palladium(0) (58mg, 0.05mmol) and potassium carbonate (1.104g, 8mmol) added. The mixture was heated at 80°C in a Smithcreator® microwave for 20 minutes. Diethyl ether and water were added and the organic layer washed with water, dried ($MgSO_4$) and evaporated. The brown oil was purified by flash chromatography, eluting with 5-20% ethyl acetate/isohexane to give the title compound (120mg).

^{1}H NMR ($CDCl_3$) δ: 1.38(3H, t), 2.07-2.15(2H, m), 2.87-2.92(2H,m), 3.09-3.14(2H, m), 3.78(3H, s), 4.38(2H, q), 6.78(1H, dd), 7.08(1H, d), 7.33(1H, dd), 7.54(1H, t), 7.84(1H, d), 8.07(1H, dd).

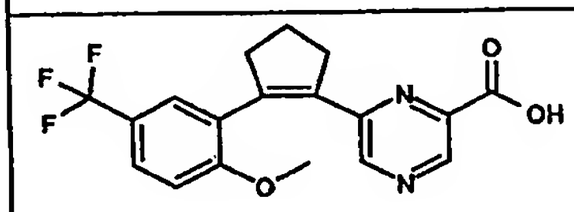
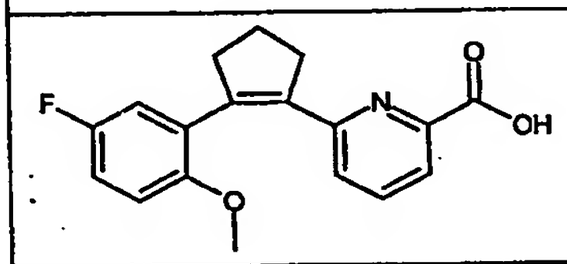
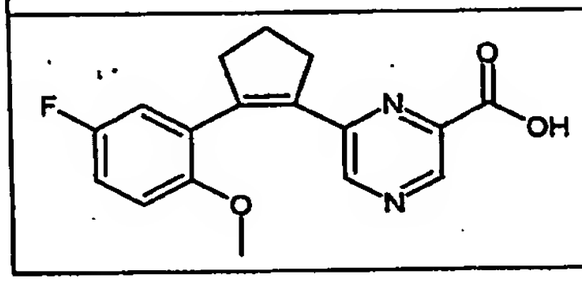
6-{2-[2-(Methyloxy)-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid



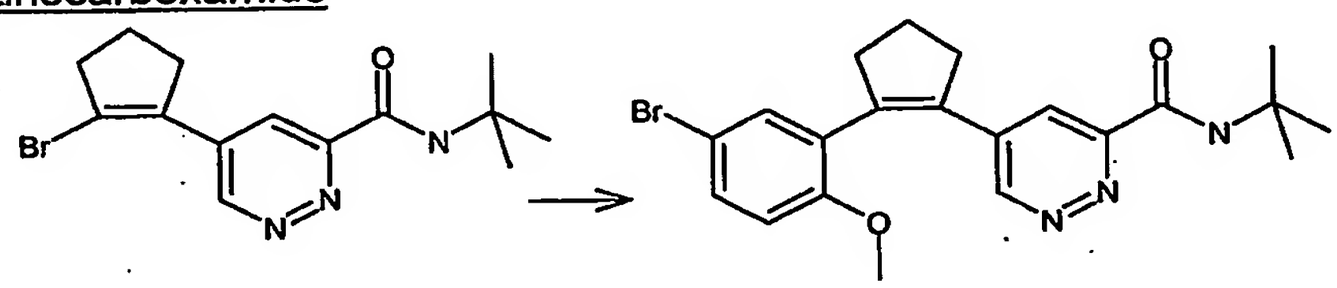
{2-[2-(Methyloxy)-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}boronic acid (5.5g, 19.2mmol), ethyl 6-bromopyridine-2-carboxylate (4.42g, 19.2mmol), potassium carbonate (13.29g, 96.2mmol) and tetrakis(triphenylphosphine)palladium(0) were refluxed in 1:1

ethanol/toluene (200ml) under nitrogen in the dark for 16 hours. After cooling the reaction was filtered over celite and the solvent removed in vacuo, the residue was taken up in ethyl acetate and washed with water and brine, dried over $MgSO_4$, filtered and concentrated in vacuo to yield a yellow solid. This was purified by column chromatography eluting in 50% ethyl acetate/isohexane. This yielded the title compound as a yellow solid (5.51g, 79%). LC/MS Rt = 3.22, [MH^+] 364.

The following compounds were prepared by a similar route to 6-{2-[2-(methyloxy)-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid from the appropriate intermediates.

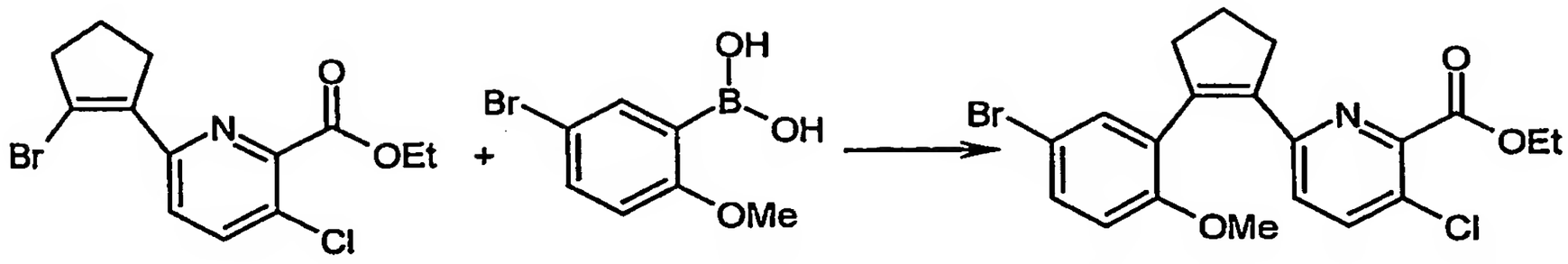
	Name	LC/MS
	6-{2-[2-(Methyloxy)-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid	t = 3.66, [MH^+] 365
	6-{2-[5-Fluoro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	t = 2.70min, [MH^+] 314
	6-{2-[5-Fluoro-2-(methyloxy)phenyl]1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid	t = 3.59min, [MH^+] 315

<u>5-{2-[5-Bromo-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-N-(1,1-dimethylethyl)-3-pyridazinecarboxamide</u>



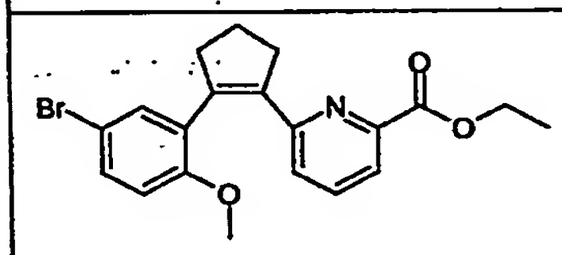
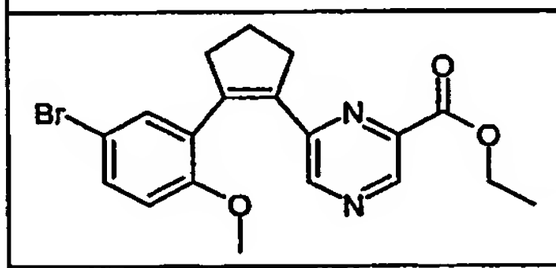
5-(2-Bromo-1-cyclopenten-1-yl)-N-(1,1-dimethylethyl)-3-pyridazinecarboxamide (8.3g, 25.5mmol), 5-bromo-2-(methyloxy)phenylboronic acid (6.9g, 30mmol), tetrakis(triphenylphosphine)palladium(0) (1.51g, 1.3mmol) and potassium carbonate(8.0g, 57.97mmol) in dimethoxyethane (60ml) were refluxed overnight under nitrogen, in the dark.The reaction mixture was then filtered through celite and chromatographed giving the title compound (7.0g, 65% yield). LC/MS Rt=3.71mins [MH^+] 432, 433.

<u>Ethyl 6-{2-[5-bromo-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-3-chloro-2-pyridinecarboxylate</u>

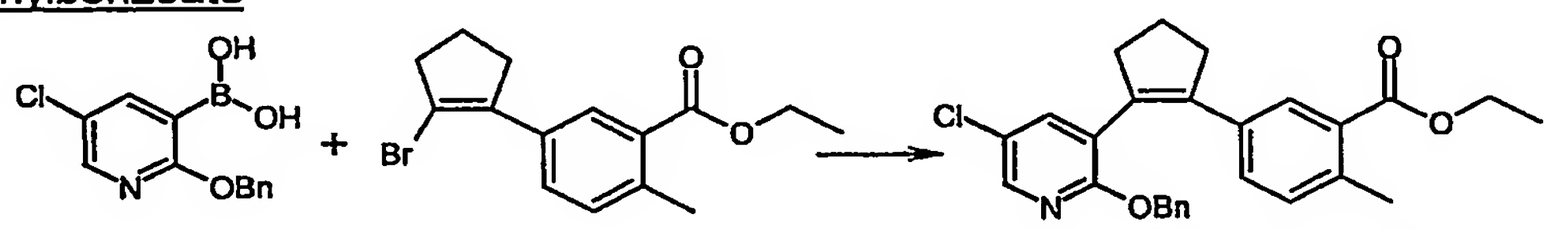


A mixture of ethyl 6-(2-bromo-1-cyclopenten-1-yl)-3-chloro-2-pyridinecarboxylate (110mg, 0.33mmol), 5-bromo-2-(methyloxy)phenylboronic acid (77mg, 0.33mmol), potassium carbonate (276mg, 2mmol) and tetrakis(triphenylphosphine)palladium(0) (38mg, 0.033mmol) in 1,2-dimethoxyethane (4ml) was stirred and heated at 70°C under nitrogen for 2 hours when a further portion of 5-bromo-2-methoxyphenylboronic acid (77mg, 0.33mmol) was added. After heating for a further 2 hours the mixture was cooled, dissolved in diethyl ether/water and the organic phase dried (magnesium sulphate) evaporated and the residue purified by chromatography on silica eluting with ethyl acetate/iso-hexane (7:93) to give 110mg of colourless oil.
LC/MS Rt=4.14, [MH+] 438.3.

The following icompounds were prepared by a similar route to ethyl 6-{2-[5-bromo-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-3-chloro-2-pyridinecarboxylate from the appropriate intermediates.

	Name	Data
	Ethyl 6-{2-[5-bromo-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS: Rt = 3.80 min. [M+H] = 402, 404.
	Ethyl 6-{2-[5-bromo-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylate	LC/MS: Rt = 3.66min. [M+H] = 403, 405.

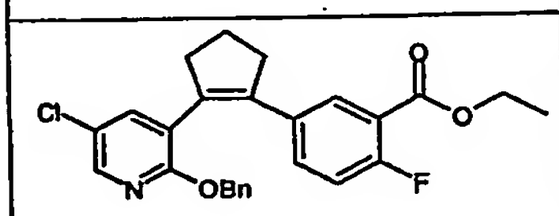
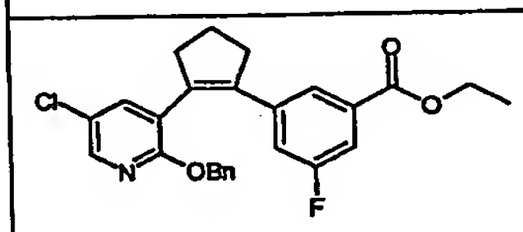
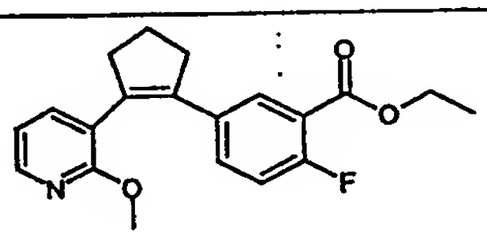
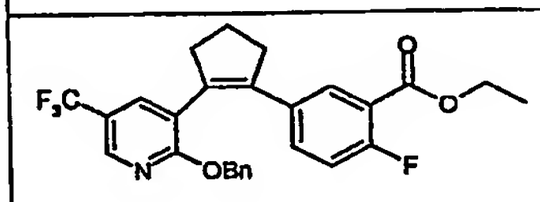
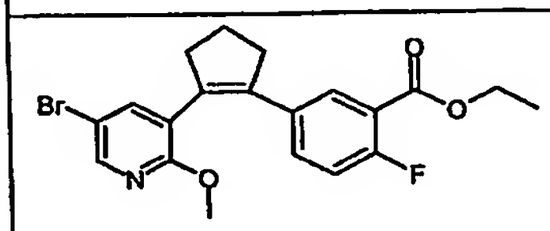
<u>Ethyl 5-(2-{5-chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-2-methylbenzoate</u>



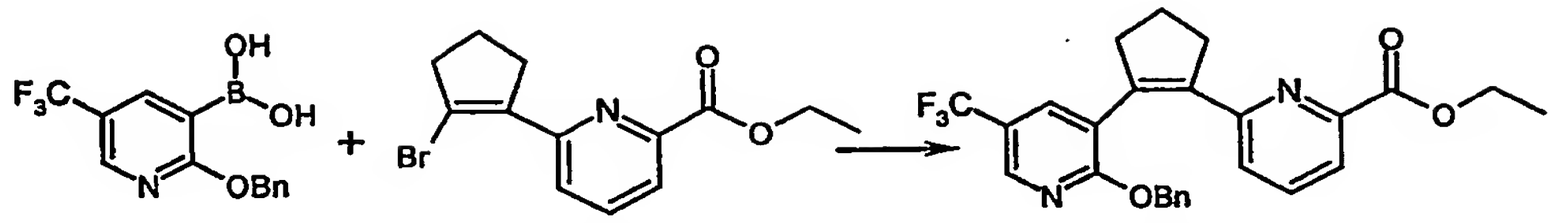
{5-Chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}boronic acid (247mg, 0.938mmol) and ethyl 5-(2-bromo-1-cyclopenten-1-yl)-2-methylbenzoate (290mg, 0.938mmol) were dissolved in toluene/ethanol (1:1, 4ml) under nitrogen and tetrakis(triphenylphosphine)palladium(0) (54mg, 0.047mmol) and potassium carbonate (1.04g, 7.5mmol) added. The mixture was heated at 80°C in a Smithcreator® microwave for 10 minutes. Diethyl ether and water were added and the organic layer washed with water, dried ($MgSO_4$) and evaporated. The

brown oil was purified by flash chromatography, eluting with 3% ethyl acetate/isohexane to give the title compound (262mg). LC/MS Rt=4.47min [MH^+] 448, 450.

The following compounds were prepared by a similar route to ethyl 5-(2-{5-chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-2-methylbenzoate from the appropriate intermediates.

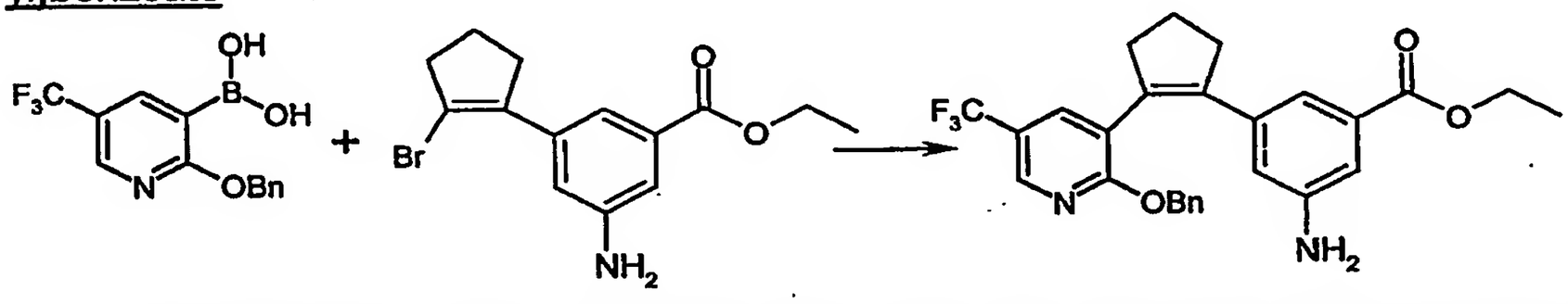
	COMPOUND NAME	^{1}H NMR/LCMS
	Ethyl 5-(2-{5-chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-2-fluorobenzoate	($CDCl_3$) δ: 1.33(3H, t), 2.05-2.08(2H, m), 2.82-2.91(4H, m), 4.31(2H, q), 5.27(2H, s), 6.84(1H, dd), 7.11(1H, m), 7.22-7.29(6H, m), 7.66(1H, dd), 8.00(1H, d)
	Ethyl 5-(2-{5-chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-3-fluorobenzoate	($CDCl_3$) δ: 1.32(3H, t), 2.04-2.11(2H, m), 2.83-2.92(4H, m), 4.29(2H, q), 5.26(2H, s), 6.89(1H, dd), 7.21-7.56(8H, m), 8.01(1H, d)
	Ethyl 2-fluoro-5-{2-[2-(methyloxy)-3-pyridinyl]-1-cyclopenten-1-yl}benzoate	($CDCl_3$) δ: 1.34(3H, t), 2.05-2.12(2H, m), 2.83-2.87(2H, m), 2.89-2.94(2H, m), 3.85(3H, s), 4.32(2H, q), 6.77(1H, dd), 6.88(1H, dd), 7.15(1H, td), 7.24(1H, dd), 7.69(1H, dd), 8.07(1H, dd).
	Ethyl 2-fluoro-5-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}benzoate	Rt = 4.42min. [MH^+] 486
	Ethyl 5-{2-[5-bromo-2-(methyloxy)-3-pyridinyl]-1-cyclopenten-1-yl}-2-fluorobenzoate	Rt = 4.10min. [MH^+] 420, 422.

Ethyl 6-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate



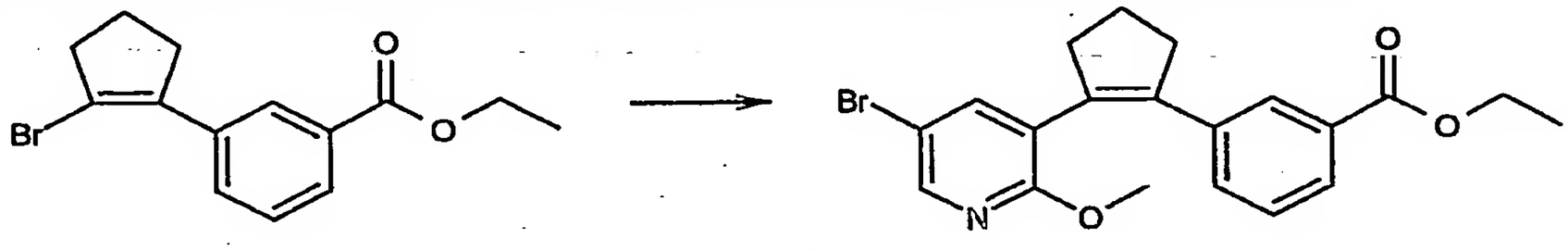
[2-[(Phenylmethyl)oxy]-5-(trifluoromethyl)-3-pyridinyl]boronic acid (3.71g, 12.5mmol) and 6-(2-bromocyclopent-1-enyl)-pyridine-2-carboxylic acid ethyl ester (1.85g, 6.25mmol) were dissolved in dioxane (75mL) under nitrogen together with tris(dibenzylideneacetone)dipalladium(0) (86mg, 0.094mmol), tri(*t*-butyl)phosphonium tetrafluoroborate (82mg, 0.28mmol) and potassium fluoride (1.19g, 20.5mmol). The mixture was heated at 100°C for 3hours. After cooling, the dioxane was removed *in vacuo* and the residue was partitioned between diethyl ether and water. The aqueous was extracted with further ether, dried (Na_2SO_4) and concentrated *in vacuo*. The resulting brown oil was purified by flash chromatography on silica (gradient elution, 0-3% ethyl acetate/cyclohexane) to give the title compound (871mg).
LC/MS Rt=4.09min [MH^+] 469.

<u>Ethyl 3-amino-5-{2-[2-(phenylmethoxy)-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate</u>



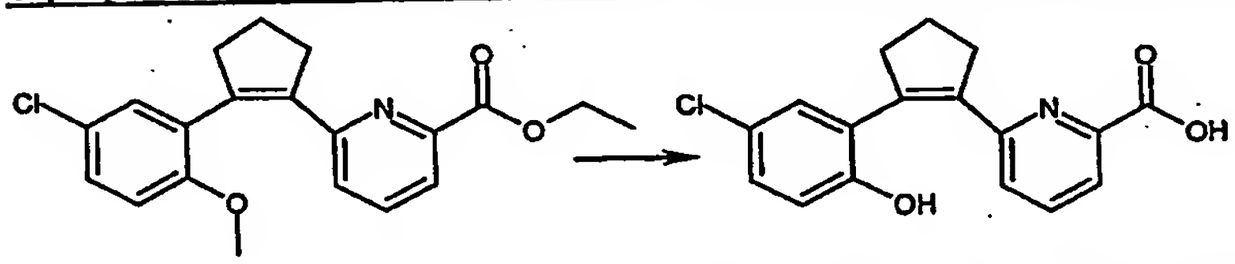
2-(Phenylmethoxy)-5-(trifluoromethyl)pyridine-3-boronic acid (6.0g, 20.2mmol) and ethyl 3-amino-5-(2-bromocyclopent-1-enyl)benzoate (3.16g, 10.1mmol) were dissolved in dimethoxyethane (50mL) under nitrogen, and tetrakis(triphenylphosphine)palladium(0) (0.58g, 0.5mmol) and 2N aqueous sodium carbonate solution (10ml) were added. The mixture was heated at 80°C for 18hours. After cooling, the solvents were removed in vacuo, and the residue was partitioned between diethyl ether and water. The aqueous was extracted with further ether (x2), and the combined organic layers were dried (Na_2SO_4) and concentrated in vacuo. The resulting dark brown oil was purified using an acidic solid phase cartridge (Isolute® Flash SCX-2, 50g), loading the crude material as a methanol solution and eluting with 10% aqueous ammonia in methanol. Concentration of the relevant fractions in vacuo gave the title compound (4.01g).
LC/MS Rt=4.01min [MH^+] 483.

<u>Ethyl 3-{2-[5-bromo-2-(methyloxy)-3-pyridinyl]-1-cyclopenten-1-yl}benzoate</u>



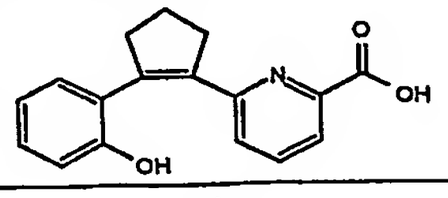
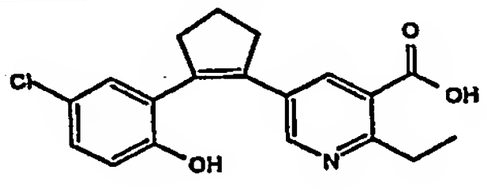
Ethyl 3-(2-bromo-1-cyclopenten-1-yl)benzoate (0.5g, 1.7mmol), [5-bromo-2-(methyloxy)-3-pyridinyl]boronic acid (0.45g, 1.7mmol), potassium carbonate (1.2g, 8.5mmol) and 1,2-dimethoxyethane (10ml) were combined and degassed for 15 minutes. tetrakis(triphenylphosphine)palladium(0) (0.2g, 0.17mmol) was added and the reaction stirred under a nitrogen atmosphere in the dark at 80°C for 3 hours. A further equivalent of [5-bromo-2-(methyloxy)-3-pyridinyl]boronic acid (0.45g, 1.7mmol) was added and the reaction continued under the above conditions for a further 14 hours. A further equivalent of [5-bromo-2-(methyloxy)-3-pyridinyl]boronic acid (0.45g, 1.7mmol) and a further equivalent of tetrakis(triphenylphosphine)palladium(0) (0.2g, 0.17mmol) was added and the reaction continued under the above conditions for a further 24 hours. The reaction was then filtered through celite and the solvent removed *in vacuo*. The residue was purified by column chromatography eluting with 10% diethyl ether/isohexane. This yielded the title compound as a clear oil (0.201g, 30%). LC/MS Rt = 4.30 [MH^+] 402/404.

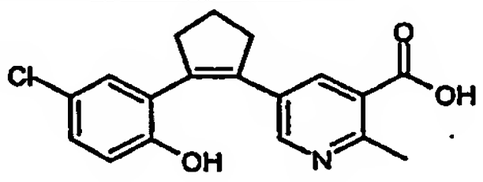
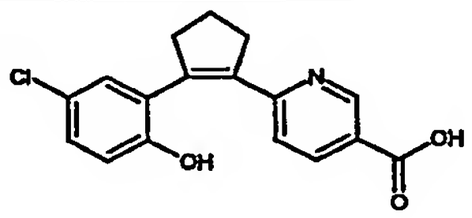
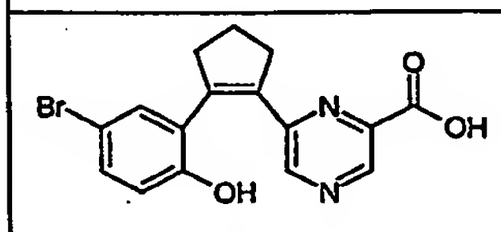
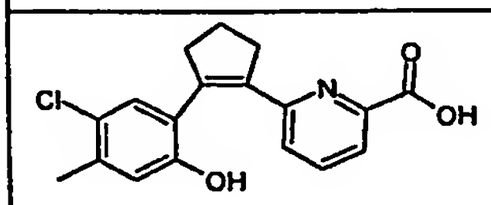
6-[2-(5-Chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid



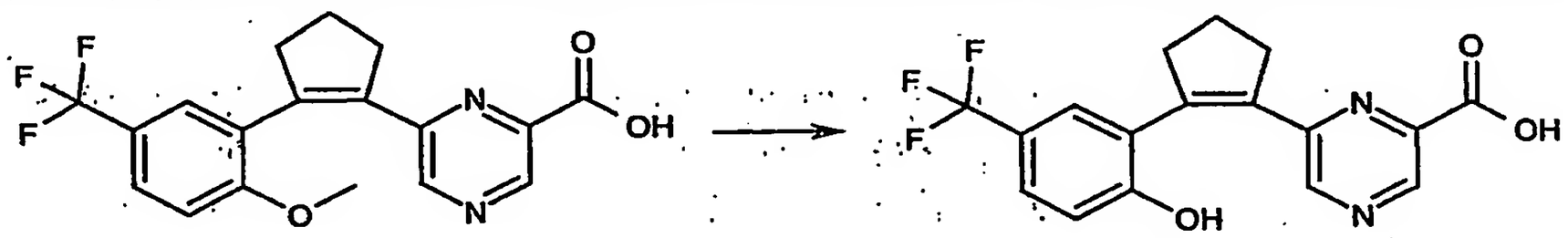
Ethyl 6-{2-[5-chloro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate (3.9g, 0.011mol) and sodium methanethiolate (4g, 0.055 mol) in dry DMF (40 ml) were heated at 100°C under nitrogen for 5h. After cooling the mixture was poured into water and washed with diethyl ether. The aqueous phase was then acidified with acetic acid and extracted with ethyl acetate (50ml x 3). The combined organic layers were dried (magnesium sulphate) and evaporated. The residue was redissolved in toluene and evaporated again to give a yellow solid that was triturated with diethyl ether to give the title compound as a yellow oil (2.6g, 76%). LC/MS: Rt 2.85 [MH+] 316,318.

The following intermediates were prepared by a similar route to 6-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid from the appropriate intermediates.

Structure	Name	Data
	6-[2-(2-Hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS: Rt = 2.20 min, [M+H] 282.
	5-[2-(5-Chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylic acid	LC/MS: Rt=2.99 min, [M+H] 344.

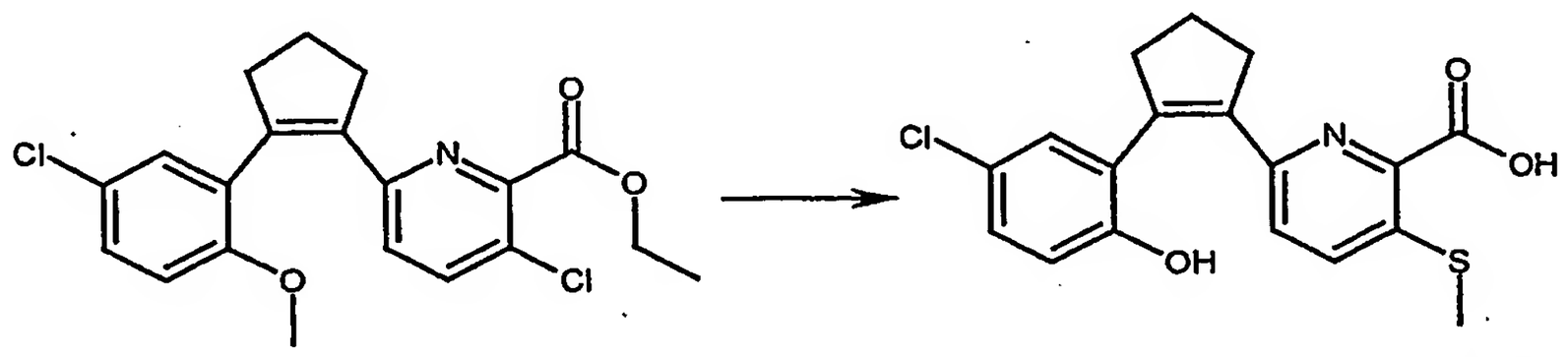
	5-[2-(5-Chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylic acid	LC/MS Rt=2.80 min, [MH+] 330.4, 332.4
	6-[2-(5-Chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-3-pyridinecarboxylic acid	LC/MS Rt=3.70 min, [MH+] 316.3, 318.4
	6-[2-(5-Bromo-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	LC/MS: Rt=4.37 min.[M+H] = 361, 363.
	6-[2-(5-Chloro-2-hydroxy-4-methylphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS: Rt=3.02 min. [M+H] = 330

6-{2-[2-Hydroxy-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid



6-{2-[2-(Methyloxy)-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid (1.92g, 5.27mmol), sodium methanethiolate (1.87g, 26.4mmol) and DMF (40ml) were heated to 75°C for 4.5 hours. After cooling the reaction was diluted with ethyl acetate washed with water and brine. The organic layer was dried over $MgSO_4$, filtered and concentrated in vacuo to yield a yellow solid (1.66g). LC/MS Rt = 3.57, [MH^+] 351.

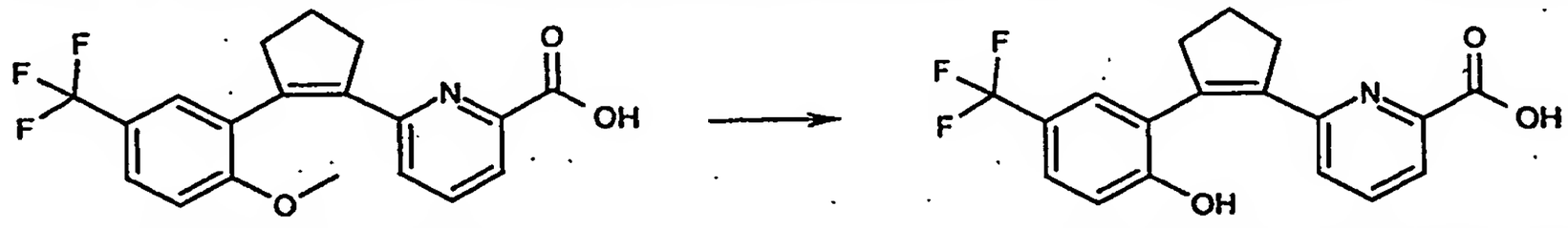
6-[2-(5-Chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-3-(methylthio)-2-pyridinecarboxylic acid



A mixture of ethyl 3-chloro-6-{2-[5-chloro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate (960mg, 2.49mmol) and sodium methanethiolate (857mg, 12.25mmol) in dimethylformamide (10ml) was stirred and heated at 100°C under nitrogen for 4 hours. After cooling the mixture was diluted with diethyl ether/water and the aqueous separated, acidified with acetic acid and extracted with ether which was washed three times with

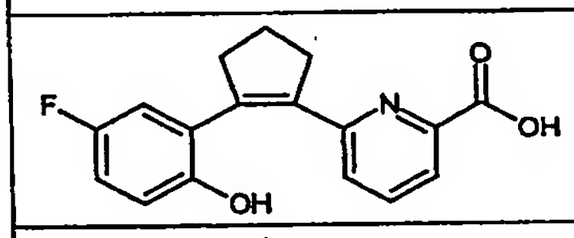
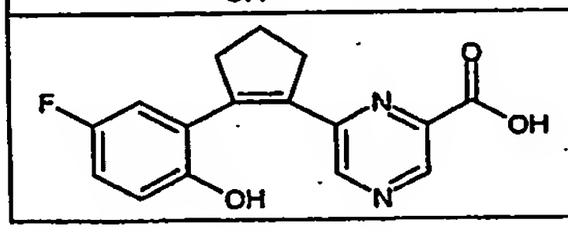
water then dried (magnesium sulphate) evaporated and triturated with ether to give an orange solid (695mg). LC/MS Rt=3.46, [MH+] 362.4, 364.4.

6-{2-[2-Hydroxy-5-(trifluoromethyl)phenyl]cyclopent-1-en-1-yl}pyridine-2-carboxylic acid

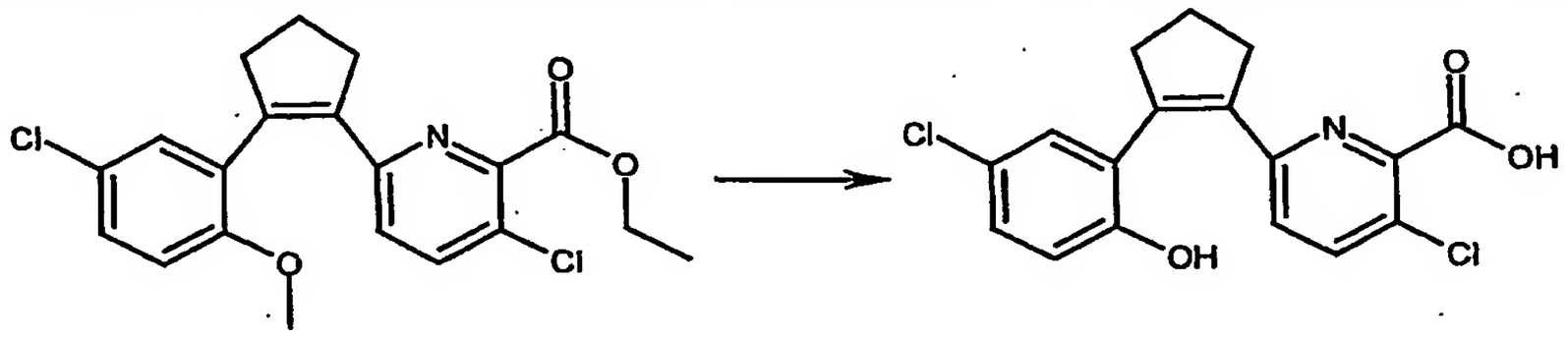


6-{2-[2-Methoxy-5-(trifluoromethyl)phenyl]cyclopent-1-en-1-yl}pyridine-2-carboxylic acid (2g, 5.5mmol) was dissolved in anhydrous dichloromethane (80ml) and cooled to -70°C. Boron tribromide (5ml, 55mmol) was added slowly and the reaction allowed to warm to -3°C and stirred under nitrogen for 19 hours. The reaction was quenched with ice and then water and stirred vigorously for 30 minutes. The aqueous layer was washed with dichloromethane (x2), the combined organic layers were washed with brine, dried over MgSO4, filtered and concentrated in vacuo to yield the title compound as a dark solid (2.13g). LC/MS Rt = 3.07min, [MH^+] 350.

The following intermediates were prepared by a similar route to 6-{2-[2-hydroxy-5-(trifluoromethyl)phenyl]cyclopent-1-en-1-yl}pyridine-2-carboxylic acid from the appropriate intermediates.

	Name	LC/MS
	6-{2-[5-Fluoro-2-hydroxyphenyl]-1-cyclopenten-1-yl}2-pyridinecarboxylic acid	Rt = 2.50min [MH^+] 300.
	6-{2-[5-Fluoro-2-hydroxyphenyl]-1-cyclopenten-1-yl}2-pyrazinecarboxylic acid	Rt = 3.53min [MH^+] 301.

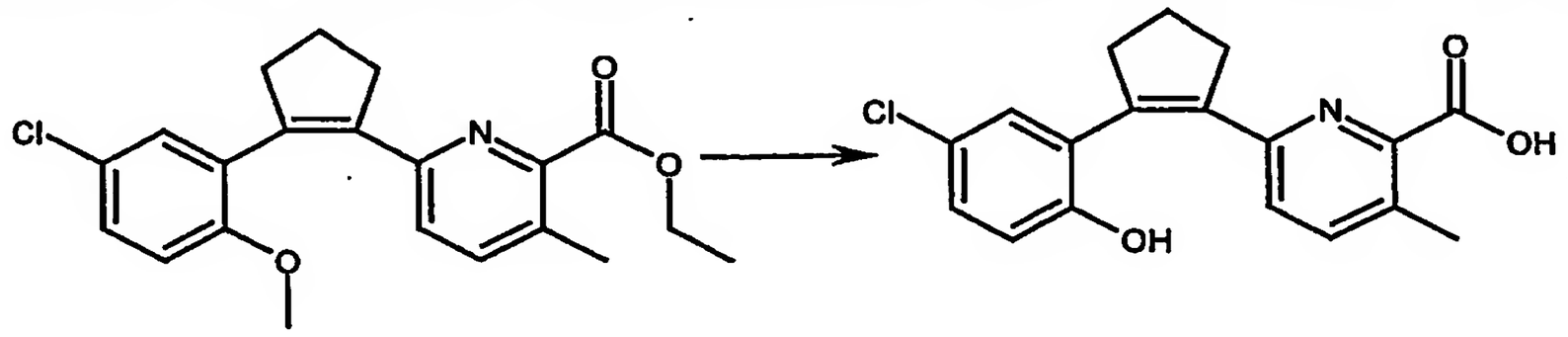
3-Chloro-6-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid



A solution of ethyl 3-chloro-6-{2-[5-chloro-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate (2.35g, 6mmol) in dichloromethane (15ml) was cooled to –50°C and 1M boron tribromide in dichloromethane (20ml) was added.
The mixture was allowed to warm to room temperature and after 3 hours was poured onto ice and basified with 2M sodium hydroxide solution then acidified with acetic acid. The

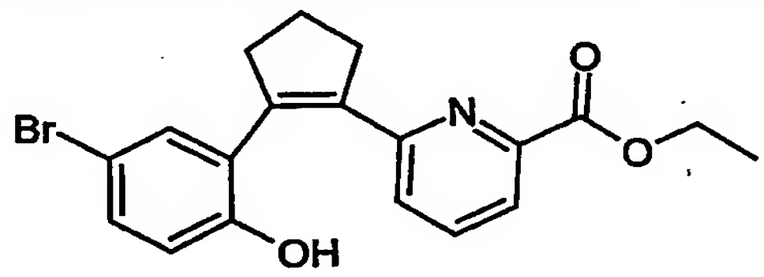
organic layer was separated, dried (magnesium sulphate), toluene (30ml) added and evaporated to give a yellow gum (2.16g). LC/MS t=4.09, [MH+] 350.4

6-[2-(5-Chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylic acid



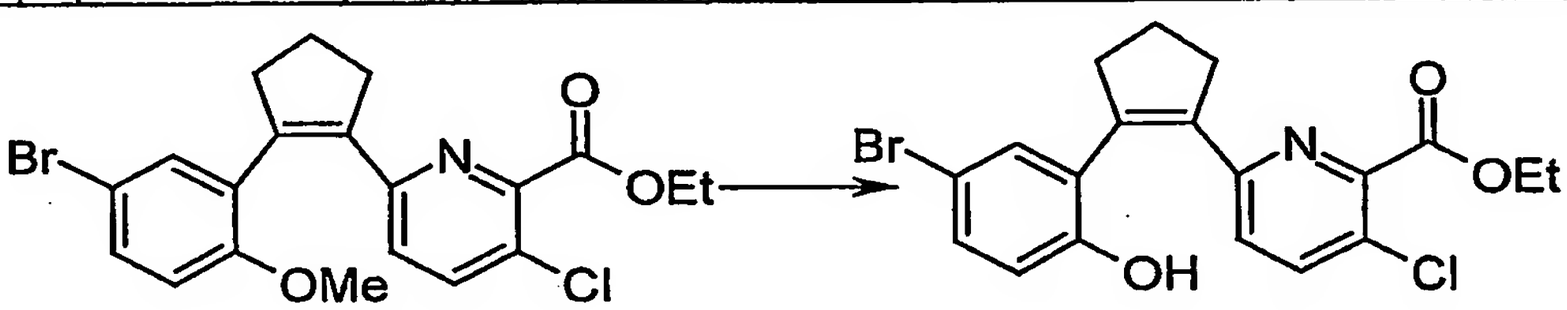
Procedure as for 3-chloro-6-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid. LC/MS t=3.05, [MH+] 330.4

Ethyl 6-[2-(5-bromo-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate



1.0M boron tribromide in dichloromethane (9.95ml, 9.95mmol) was added to a solution of ethyl 6-[2-(5-bromo-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate (2.0g, 4.98mmol) in dry dichloromethane (50ml) at –78°C. The reaction mixture was allowed to warm to room temperature over 4 hours. The mixture was quenched with water (50ml). The organic phase was separated, dried and evaporated to give the title compound as a yellow solid 2.0g 100%. LC/MS: Rt = 3.64 min. [M+H] = 388, 390 (1Br).

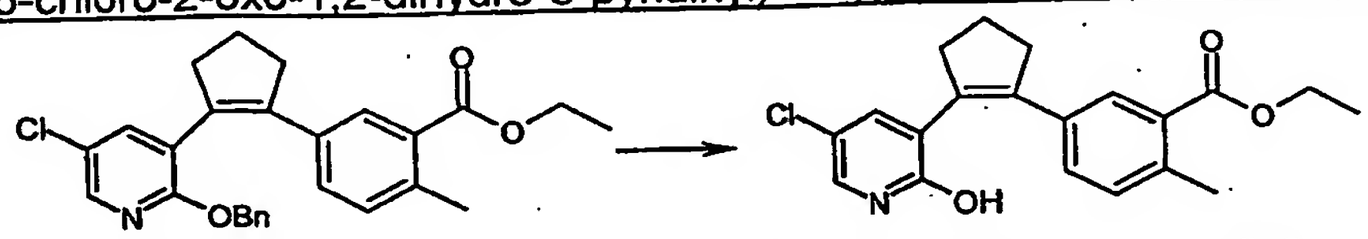
Ethyl 6-[2-(5-bromo-2-hydroxyphenyl)-1-cyclopenten-1-yl]-3-chloro-2-pyridinecarboxylate



A solution of ethyl 6-{2-[5-bromo-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-3-chloro-2-pyridinecarboxylate (501mg, 1.15mmol) in dichloromethane (5ml) was cooled to –50°C and 1M boron tribromide in dichloromethane (5ml) was added.
The mixture was allowed to warm to room temperature and after 2 hours was poured onto ice and basified with 2M sodium hydroxide solution then acidified with acetic acid. The organic layer was separated, dried (magnesium sulphate), toluene (10ml) added and evaporated to dryness. The residue was dissolved in ethanol (25ml) and sulphuric acid (2ml) and refluxed for 5 hours then left at room temperature for 15 hours. After evaporation the residue was dissolved in ether/water, basified with potassium carbonate and the organic phase dried (magnesium sulphate), evaporated and purified by

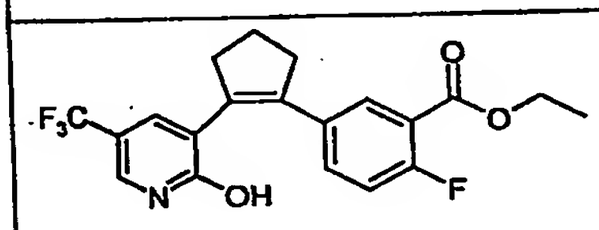
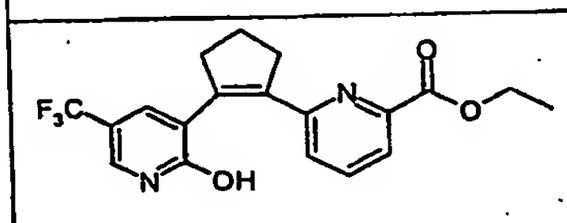
chromatography on silica eluting with ethyl acetate/iso-hexane (18:82) to give 415mg of colourless gum. LC/MS t=3.97, [MH+] 424.3

Ethyl 5-[2-(5-chloro-2-oxo-1,2-dihydro-3-pyridinyl)-1-cyclopenten-1-yl]-2-methylbenzoate

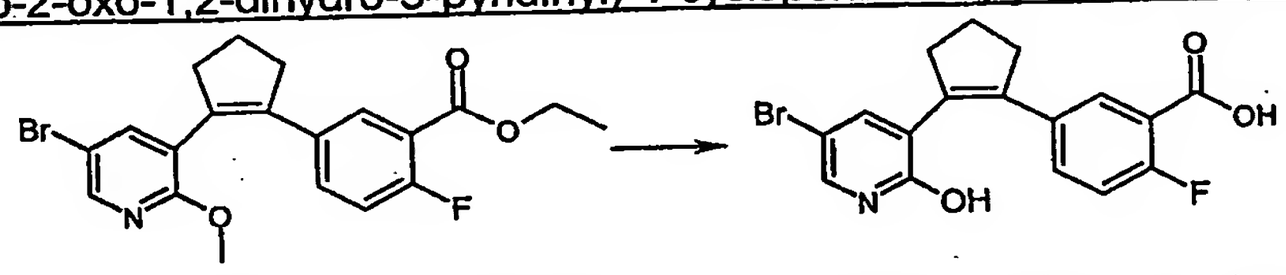


Ethyl 5-(2-{5-chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-2-methylbenzoate (200mg, 0.447mmol) was dissolved in glacial acetic acid (0.5ml) and 45% hydrogen bromide in acetic acid (1ml) added. The mixture was stirred at room temperature for 1.5 hours. 5% sodium bicarbonate solution was added carefully, followed by diethyl ether. The aqueous layer was re-extracted with diethyl ether and the combined extracts washed with 5% sodium bicarbonate solution, dried ($MgSO_4$) and evaporated to leave the title compound (76mg). LC/MS Rt=3.51min [MH^-] 356, 358.

The following intermediates were prepared by a similar route to ethyl 5-[2-(5-chloro-2-oxo-1,2-dihydro-3-pyridinyl)-1-cyclopenten-1-yl]-2-methylbenzoate from the appropriate intermediates.

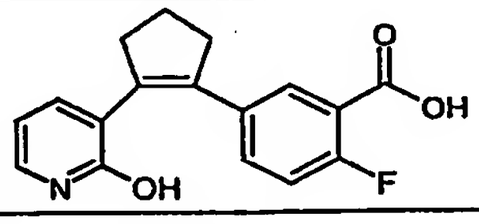
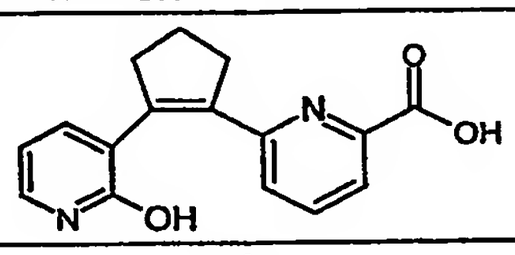
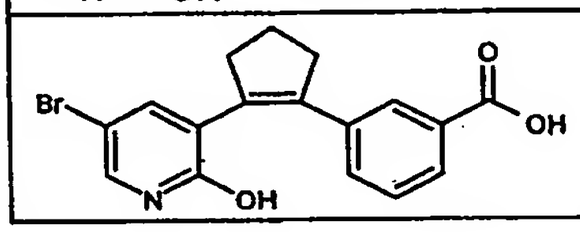
	Name	Data
	Ethyl 2-fluoro-5-{2-[2-oxo-5-(trifluoromethyl)-1,2-dihydro-3-pyridinyl]-1-cyclopenten-1-yl}benzoate	LC/MS Rt=3.54min [MH^+] 396.
	Ethyl 6-{2-[2-oxo-5-(trifluoromethyl)-1,2-dihydro-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS Rt=3.12min [MH^+] 379.

5-[2-(5-Bromo-2-oxo-1,2-dihydro-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid

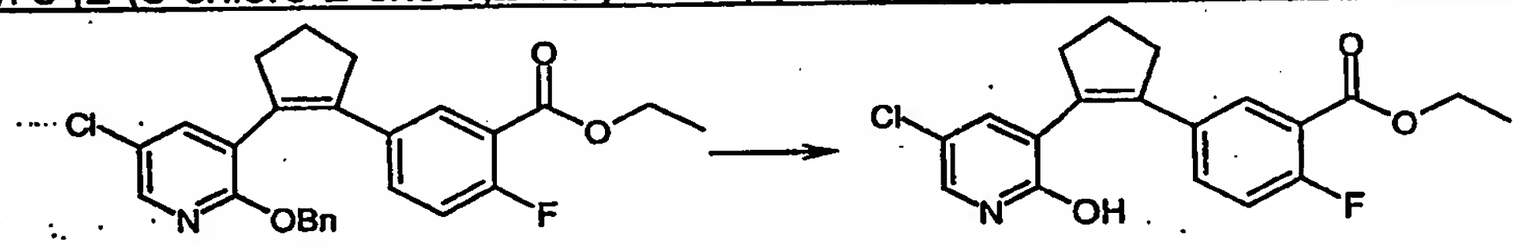


Ethyl 5-{2-[5-bromo-2-(methyloxy)-3-pyridinyl]-1-cyclopenten-1-yl}-2-fluorobenzoate (127mg, 0.302mmol),was dissolved in glacial acetic acid (1ml) and 48% aqueous hydrogen bromide (1ml) added. The mixture was heated to reflux for 45 minutes. 5% Sodium bicarbonate solution was added carefully and the mixture extracted with ethyl acetate. The organic layer was washed with water, dried ($MgSO_4$) and evaporated to give the title compound (96mg). LC/MS Rt=3.19min [MH^+] 378, 380.

The following intermediates were prepared by a similar route to 5-[2-(5-bromo-2-oxo-1,2-dihydro-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid from the appropriate intermediates.

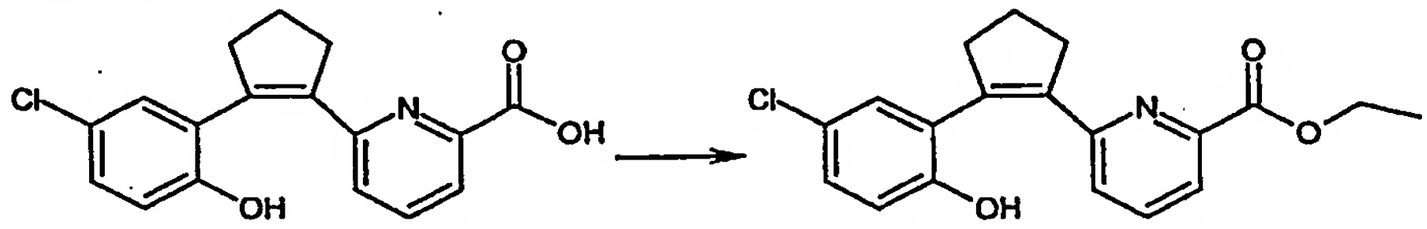
	Name	LC/MS
	2-Fluoro-5-[2-(2-oxo-1,2-dihydro-3-pyridinyl)-1-cyclopenten-1-yl]benzoic acid	Rt=2.66min [MH^+] 300.
	6-[2-(2-Oxo-1,2-dihydro-3-pyridinyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	Rt=1.48min [MH^+] 283
	3-[2-(5-Bromo-2-oxo-1,2-dihydro-3-pyridinyl)-1-cyclopenten-1-yl]benzoic acid	Rt = 2.89min [MH^+] 358, 360

Ethyl 5-[2-(5-chloro-2-oxo-1,2-dihydro-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate



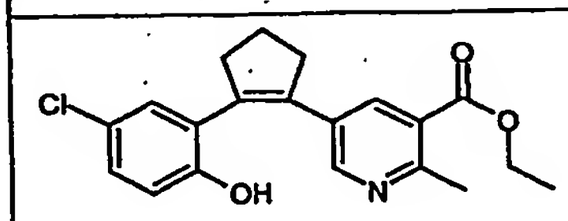
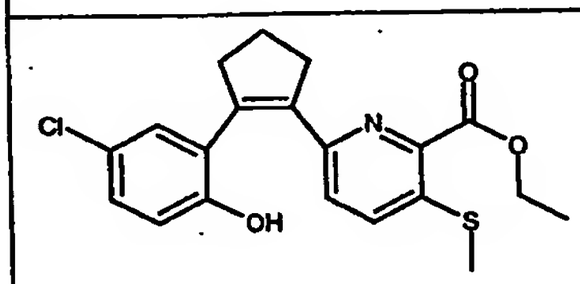
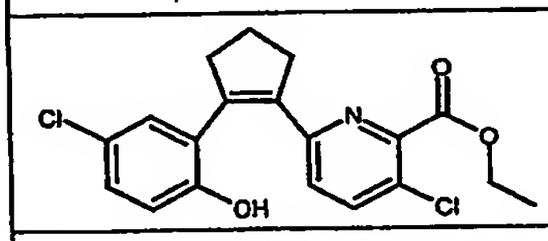
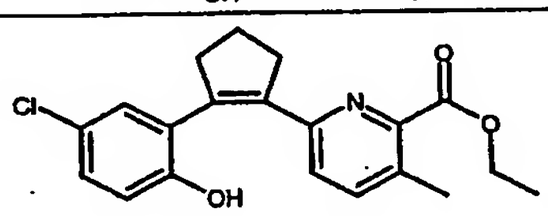
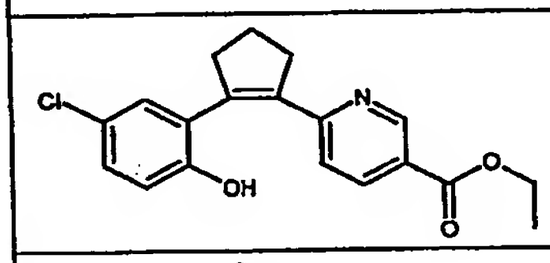
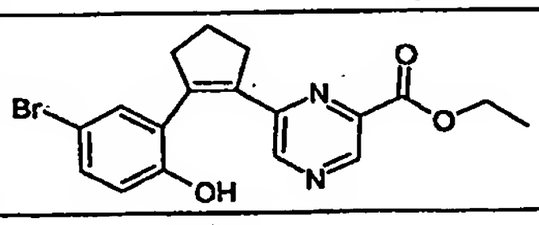
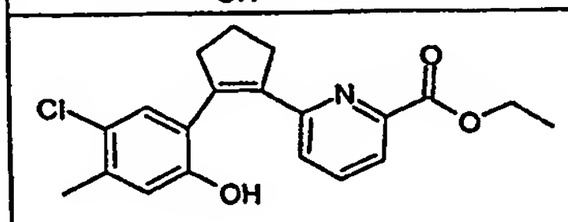
Ethyl 5-(2-{5-chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-2-fluorobenzoate (1.32g, 2.93mmol) was stirred in trifluoracetic acid (1ml) at room temperature for 20 hours and at 50°C for 12 hours. The mixture was poured carefully into 5% sodium bicarbonate solution and diethyl ether added. The organic layer was washed with 5% sodium bicarbonate solution, dried ($MgSO_4$)and evaporated to give the title compound as an orange oil which crystallised (1.06g).
LC/MS Rt=3.25min [MH^+] 362.5, 364.5.

Ethyl 6-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridine carboxylate

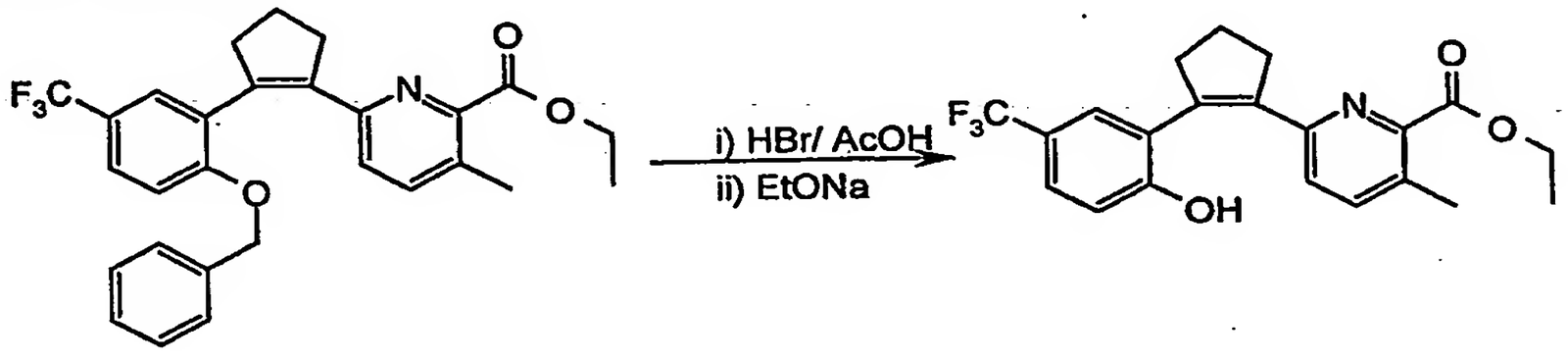


6-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid (2.6g, 0.0082mol) and concentrated sulphuric acid (1ml) in 100ml of ethanol were refluxed overnight. After cooling the mixture was quenched with ammonia, diluted with water and extracted with ethyl acetate (30ml x 3). The combined organic layers were washed with a saturated solution of sodium bicarbonate, dried (magnesium sulphate) and evaporated to dryness to give the title compound as a light yellow oil (2.5g, 89%).
LC/MS: Rt 3.65 [MH^+] 344,346 [MH-] 342,344

The following intermediates were prepared by a similar route to ethyl 6-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridine carboxylate from the appropriate intermediates.

	Name	Data
	Ethyl 5-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylate	LC/MS t=3.62, [MH+] 358.4, 360.4
	Ethyl 6-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-3-(methylthio)-2-pyridinecarboxylate	LC/MS t=3.75, [MH+] 390.4, 392.4
	Ethyl 3-chloro-6-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	LC/MS t=3.93, [MH+] 378.4
	Ethyl 6-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylate	LC/MS t=3.82, [MH+] 358.4, 360.4
	Ethyl 6-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-3-pyridinecarboxylate	LC/MS t=3.67, [MH+] 344.3, 346.3
	Ethyl 6-[2-(5-bromo-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	LC/MS: Rt = 3.48min. [M+H] = 389, 391.
	Ethyl 6-[2-(5-chloro-2-hydroxy-4-methylphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	LC/MS: Rt = 3.74 min. [M+H] = 358.

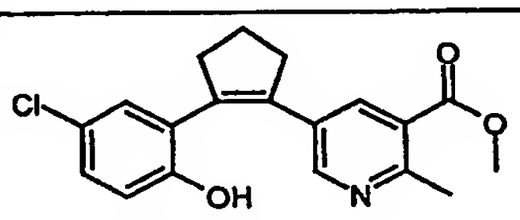
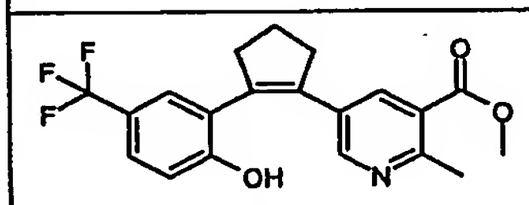
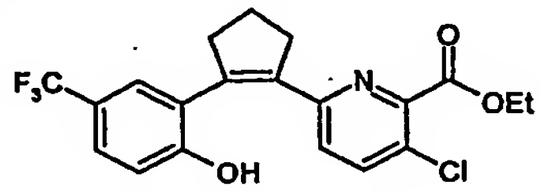
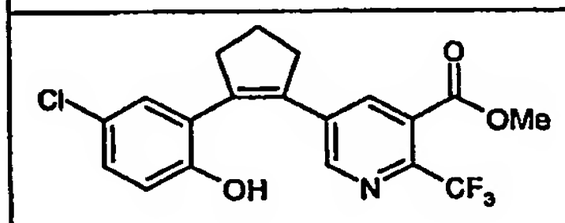
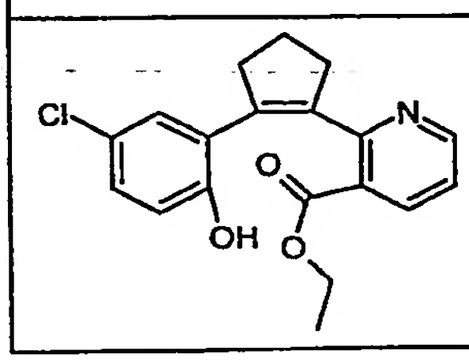
Ethyl 6-{2-[2-hydroxy-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylate



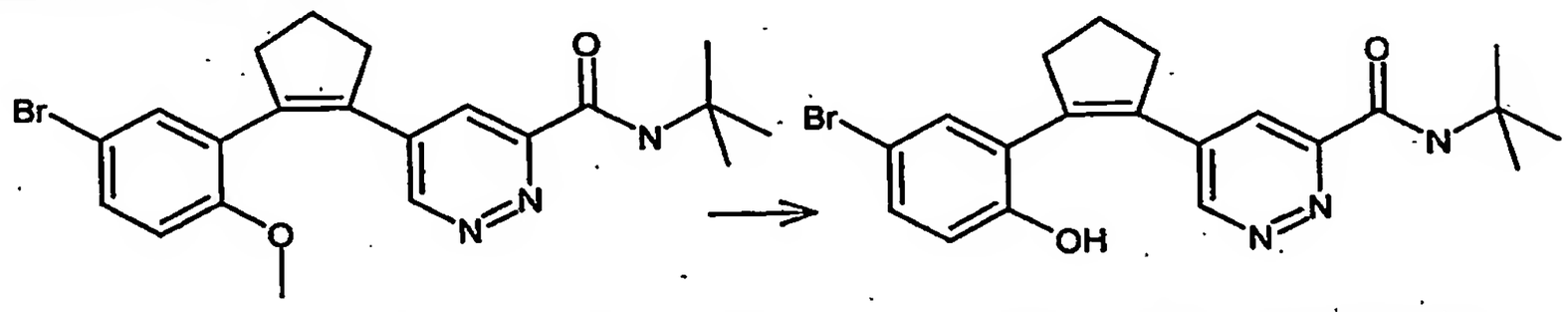
A mixture of ethyl 3-methyl-6-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate (2.21 g, 4.59 mmol) dissolved in acetic acid (5 ml) and 45% hydrogen bromide in acetic acid (10 ml) was stirred at room temperature for 3 hours. The reaction mixture was diluted with diethyl ether and water and basified with potassium carbonate. The ether layer was separated, dried over magnesium sulphate and evaporated to dryness. The residue was purified using flash chromatography eluting with ethyl acetate/ iso-hexane (15%) to give 1.44 g of yellow solid. Sodium hydride (2mg) was added to the product dissolved in ethanol and left at room temperature for 12 hours. The reaction mixture was diluted with diethyl ether and water, then acidified with acetic acid. The ether layer was washed with sodium hydrogen carbonate solution, dried over magnesium sulphate and evaporated to dryness. The residue was purified using flash chromatography eluting with 20% ethyl acetate/ iso-hexane to give the title compound as a light coloured solid. 1.11 g, 62%.

H NMR (CDCl) δ: 1.48 (3H, t), 2.08-2.15 (2H, m), 2.50 (3H, s), 2.86-3.90 (2H, m), 3.01-3.05 (2H, m), 4.45 (2H, q), 7.08 (1H, d), 7.33-7.37 (2H, m), 7.39 (1H, dd), 7.61 (1H, d).

The following intermediates were prepared by a similar route to ethyl 6-{2-[2-hydroxy-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylate from the appropriate intermediates.

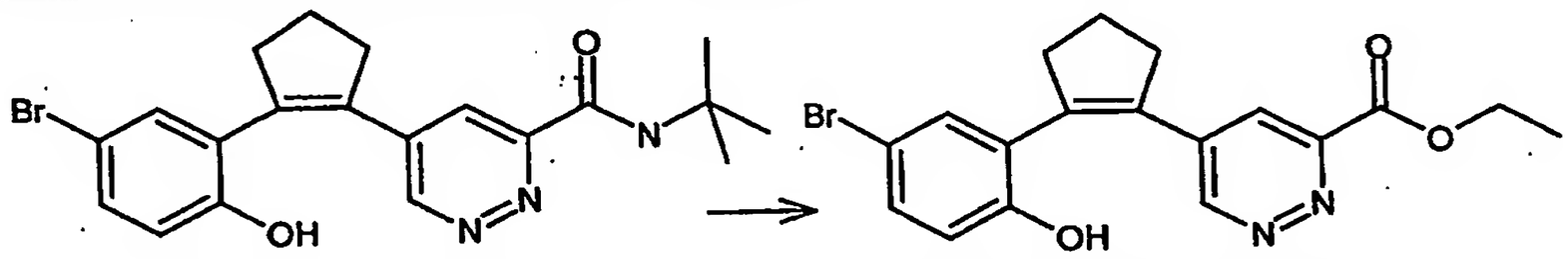
	Name	Data
	Methyl 5-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylate	LC/MS Rt=3.45, [MH+] 344.3, 346.3
	Methyl 5-{2-[2-hydroxy-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylate	LC/MS Rt=3.49, [MH+] 378.5
	Ethyl 3-chloro-6-{2-[2-hydroxy-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS Rt=3.90, [MH+] 412.5, 414.4
	Methyl 5-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	LC/MS Rt=3.75, [MH+] 398.4, 400.4
	Ethyl 2-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-3-pyridinecarboxylate	LC/MS Rt=3.26, [MH+] 344.4, 346.3

5-[2-(5-Bromo-2-hydroxyphenyl)-1-cyclopenten-1-yl]-*N*-(1,1-dimethylethyl)-3-pyridazinecarboxamide



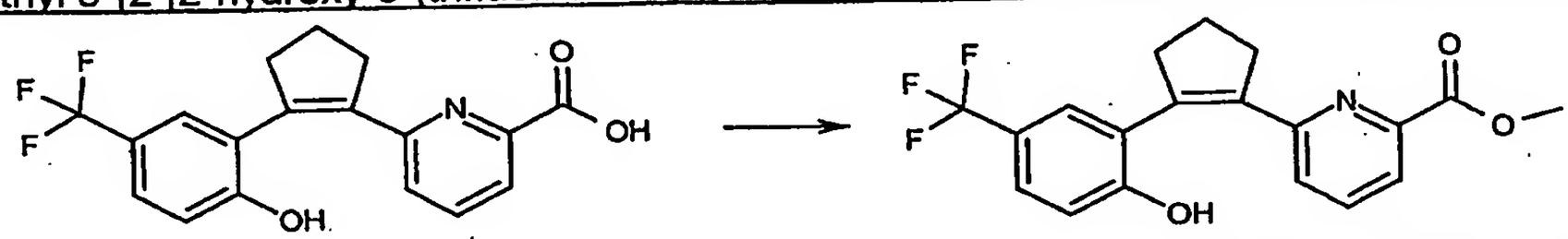
5-{2-[5-Bromo-2-(methyloxy)phenyl]-1-cyclopenten-1-yl}-N-(1,1-dimethylethyl)-3-pyridazinecarboxamide (5.3g, 12.3mmol) in dry dichloromethane (200ml) was cooled to -75°C under nitrogen and was treated slowly with boron tribromide (8.0ml, 84.8mmol). The reaction mixture was then heated to reflux for 1.5 hour.The reaction mixture was then quenched in ice-water (400ml) and after stirring at room temperature for 2 hours the organic layer was dried and evaporated to a dark brown solid (6.0g).
LC/MS Rt=3.55min [MH] 418, 419.

Ethyl 5-[2-(5-bromo-2-hydroxyphenyl)-1-cyclopenten-1-yl]-3-pyridazinecarboxylate



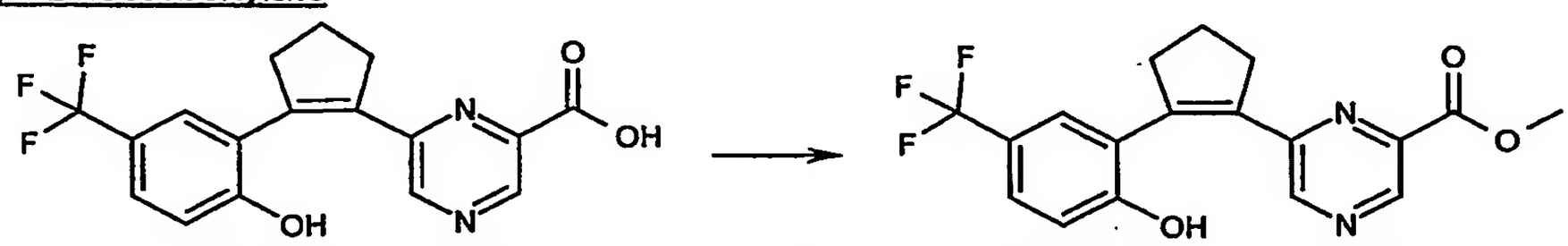
5-[2-(5-Bromo-2-hydroxyphenyl)-1-cyclopenten-1-yl]-N-(1,1-dimethylethyl)-3-pyridazinecarboxamide (6.0g, 13.95mmol) in ethanol (75ml) was treated with concentrated sulphuric acid/water (24/10ml) and refluxed for two hours. The reaction was poured into water (200ml) and extracted with ethyl acetate(3x30ml). After drying the product was purified by chromatography giving the title compound (1.8g,32% yield).
LC/MS Rt=3.2 min [MH] 391, 392.

Methyl 6-{2-[2-hydroxy-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate



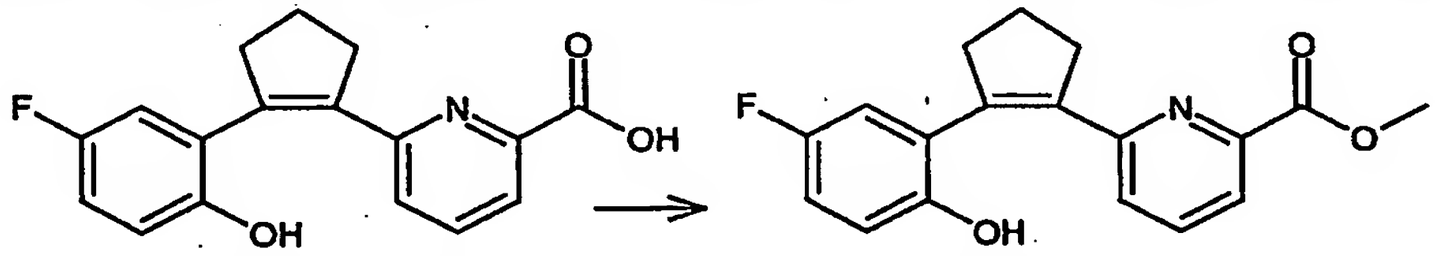
6-{2-[2-hydroxy-5-(trifluoromethyl)phenyl]cyclopent-1-en-1-yl}pyridine-2-carboxylic acid (2.49g, 7.13mmol) was dissolved in anhydrous methanol (100ml) and cooled in an ice bath. 2M Trimethylsilyldiazomethane in hexanes (25ml) was added slowly. Bubbles of nitrogen were observed after the addition of 5ml; the addition was continued until no more bubbling was observed. The solvent was then removed *in vacuo* to yield a dark oil. This was purified by column chromatography eluting with 30% ethyl acetate/isohexane. This yielded the title compound as a yellow solid. LC/MS Rt = 3.47 [MH] 364.

Methyl 6-{2-[2-hydroxy-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylate



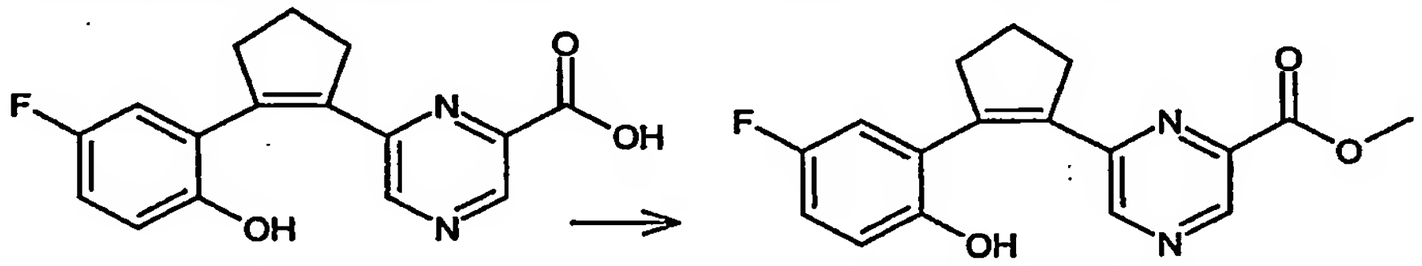
Procedure as for methyl 6-{2-[2-hydroxy-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate. LC/MS t = 3.47, [MH] 365.

Methyl 6-[2-(5-fluoro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate



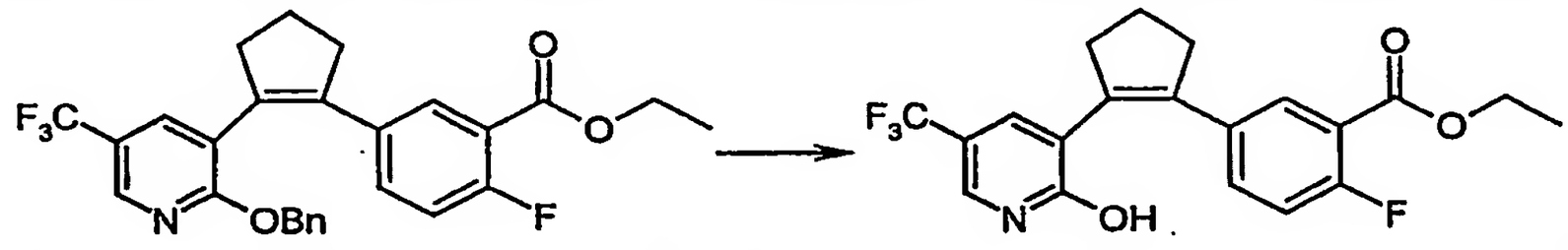
6-[2-(5-Fluoro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid (5.0g, 16.72mmol) in methanol (200ml) and concentrated sulphuric acid (4ml) were refluxed overnight under nitrogen.The reaction mixture was then cooled and treated with .880 ammonia (8ml) and evaporated to an oil under reduced pressure. After partitioning between ethyl acetate and water, the resulting product was purified by flash chromatography with a gradient of diethyl ether/iso-hexane(10-30%) giving the title compound (3.5g,83%). LC/MS Rt=3.16min. [MH^+] 314

Methyl 6-[2-(5-fluoro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate



Procedure as for methyl 6-[2-(5-fluoro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate.
LC/MS Rt = 2.98min, [MH] 315.

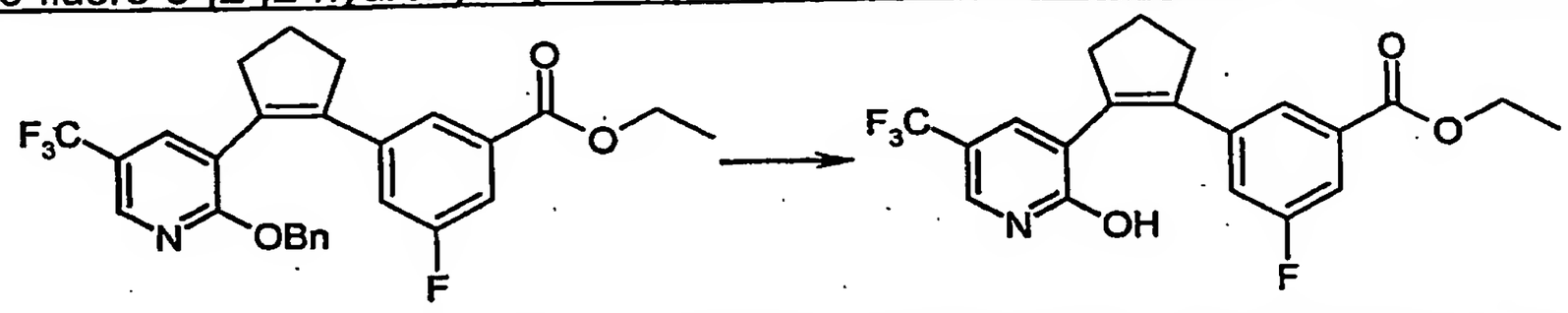
Ethyl 2-fluoro-5-{2-[2-hydroxy-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate



Ethyl 2-fluoro-5-{2-[2-(phenylmethoxy)-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate (6.77g, 14.0mmol) was dissolved in trifluoroacetic acid (50ml). The solution was stirred at room temperature for 36 hours. The mixture was treated with 5% aqueous sodium bicarbonate solution, and extracted with diethyl ether (x2). The combined extracts were dried (Na_2SO_4) and concentrated *in vacuo*. The residue was purified by flash

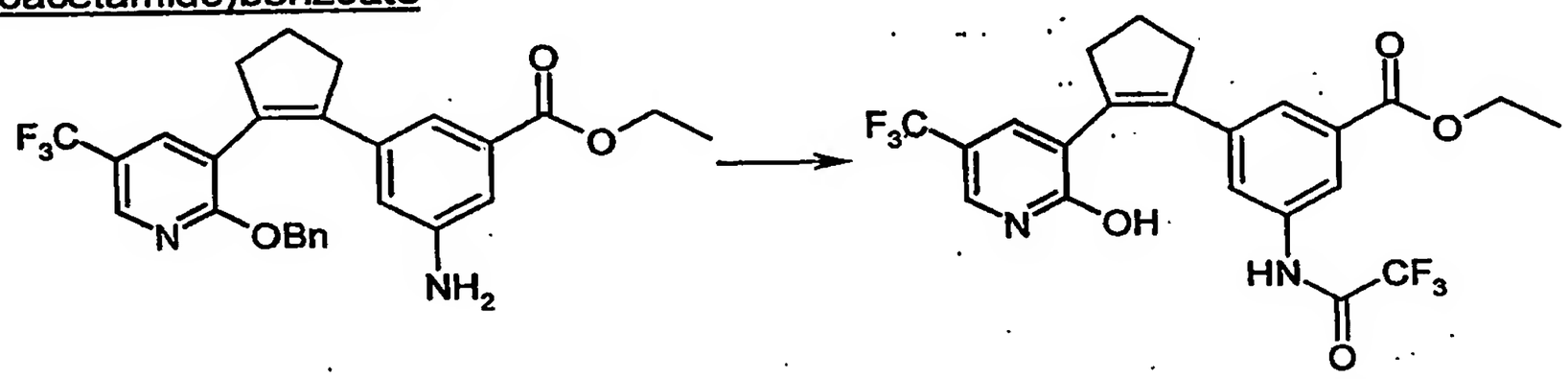
chromatography on silica (gradient elution, 0-30% ethyl acetate/cyclohexane) to give the title compound (3.35g). LC/MS Rt=3.46min [MH^+] 396.

Ethyl 3-fluoro-5-{2-[2-hydroxy-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate



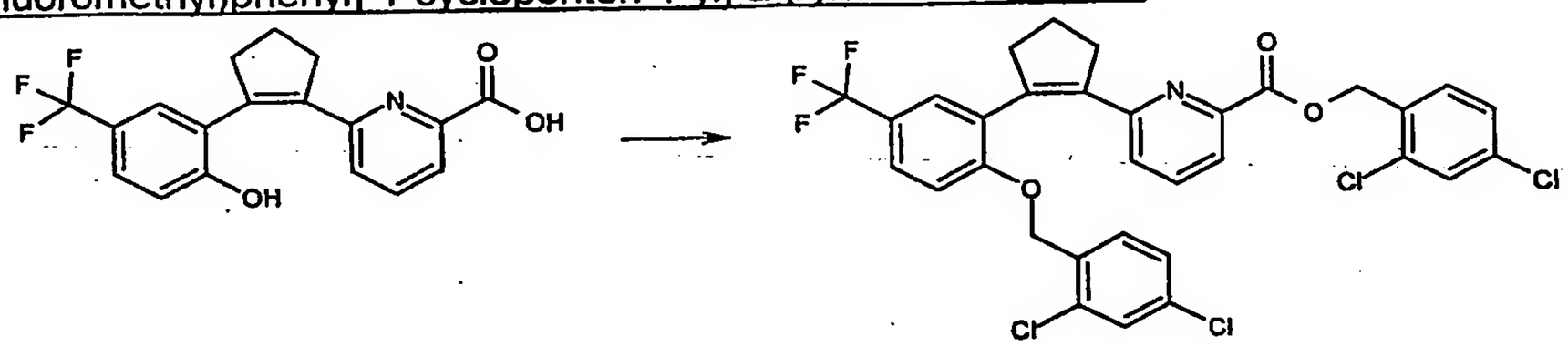
Ethyl 3-fluoro-5-{2-[2-(phenylmethoxy)-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate (7.42g, 15.3mmol) was dissolved in trifluoroacetic acid (50ml). The solution was stirred at room temperature for 18 hours. The mixture was treated with 5% aqueous sodium bicarbonate solution, and extracted with diethyl ether (x2). The combined extracts were dried (Na SO) and concentrated *in vacuo*. The residue was purified by flash chromatography on silica (gradient elution, 0-30% ethyl acetate/cyclohexane) to give the title compound (3.3g). LC/MS Rt=3.56min [MH^+] 396.

Ethyl 5-{2-[2-(hydroxy)-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}-3-(trifluoroacetamido)benzoate



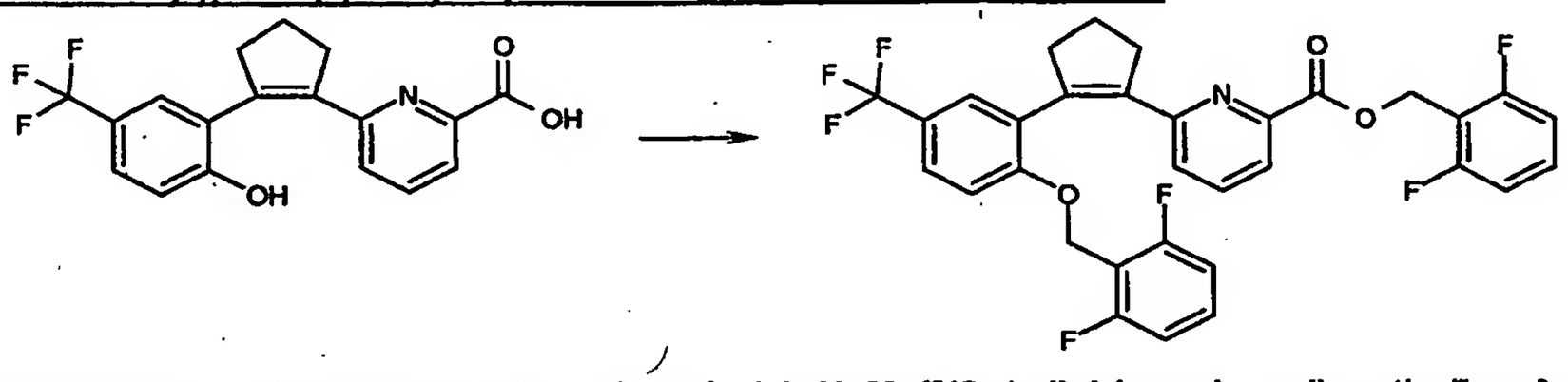
Ethyl 3-amino-5-{2-[2-(phenylmethoxy)-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate (4.5g, 7.79mmol) was dissolve in trifluoroacetic acid (50ml) and stirred at room temperature for 20hours. The mixture was neutralised with 5% aqueous sodium hydrogen carbonate, and extracted with water. The organic extracts were washed with further water, dried (Na SO), and concentrated *in vacuo*. The residue was purified by flash chromatography on silica (gradient elution, 0-65% ethyl acetate/cyclohexane) to give the required product (1.99g). LC/MS Rt=3.52min [MH^+] 489.

(2,4-Dichlorophenyl)methyl 6-{2-[2-{[(2,4-dichlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate



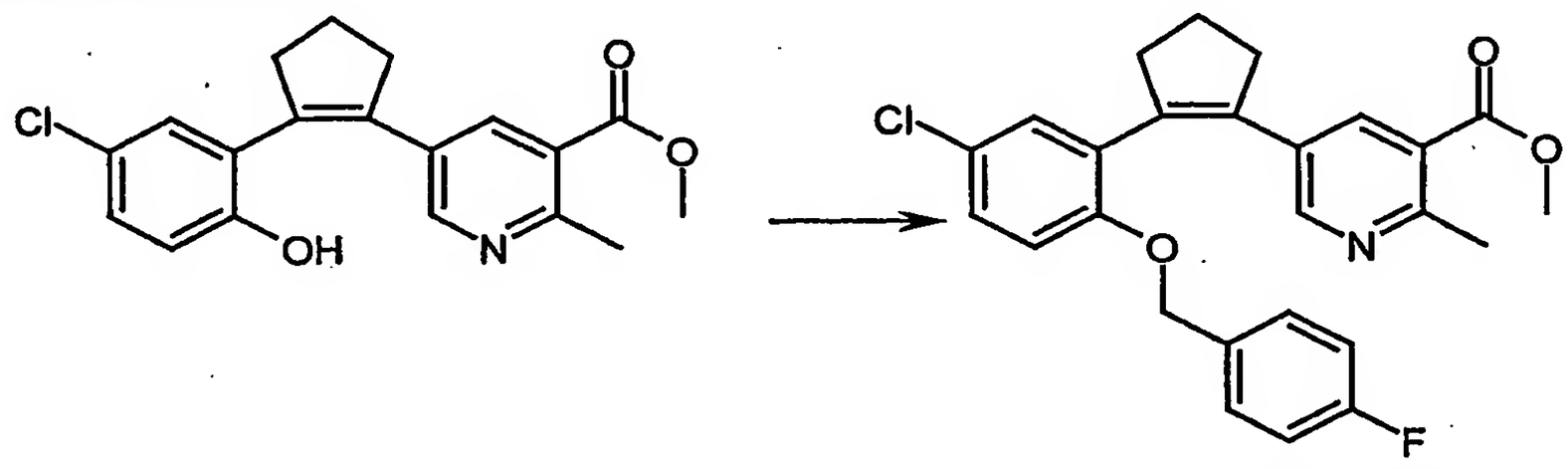
6-{2-[2-Hydroxy-5-(trifluoromethyl)phenyl]cyclopent-1-en-1-yl}-pyridine-2-carboxylic acid (0.067g, 0.19mmol), potassium carbonate (0.079g, 0.57mmol), 2,4-dichlorobenzyl bromide (0.082g, 0.42mmol) and DMF (2ml) were heated at 55°C for 3 hours under a nitrogen atmosphere. After cooling the reaction was diluted with ethyl acetate and washed with water (x2). The aqueous layers were washed with ethyl acetate (x2). The combined organic layers were then washed with brine, dried over $MgSO_4$, filtered and concentrated in vacuo to give a dark oil. This was purified by column chromatography eluting with 10% ethyl acetate/isohexane to yield the title compound as a brown oil (0.095g, 74%).
LC/MS t = 4.97, [MH] 668

(2,6-Difluorophenyl)methyl 6-{2-[2-{[(2,6-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate



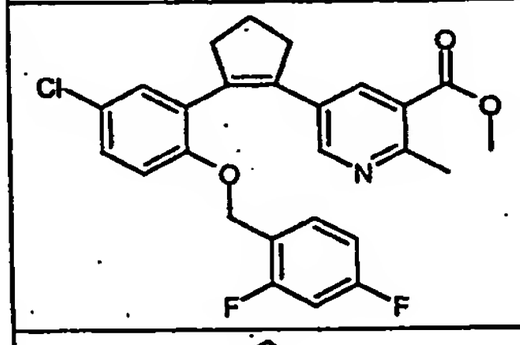
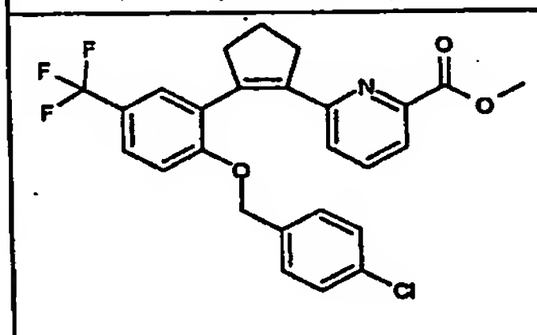
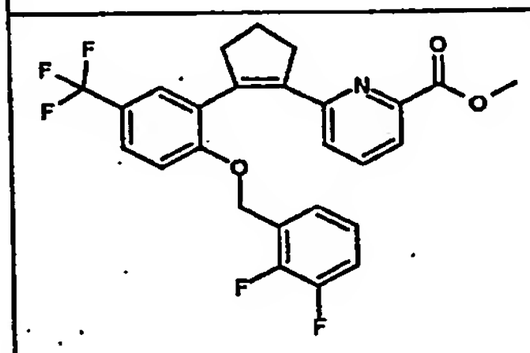
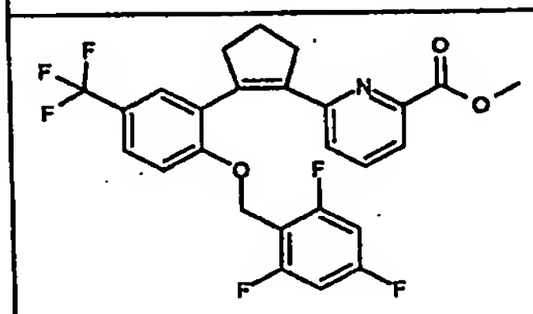
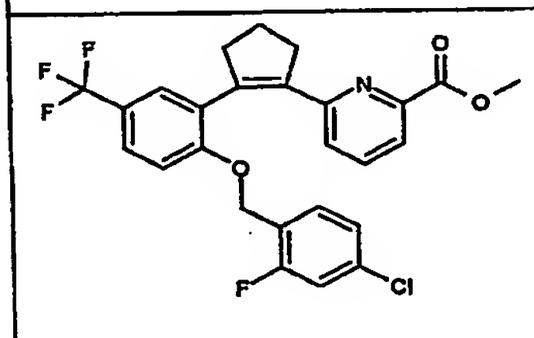
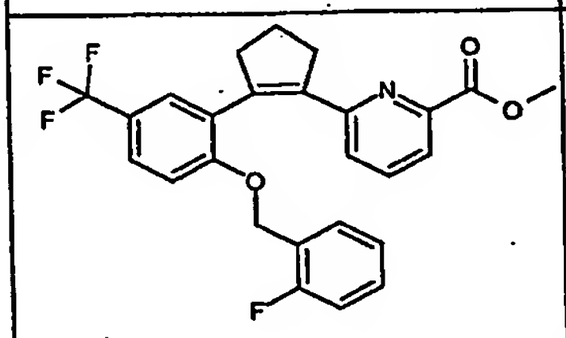
Procedure as for (2,4-dichlorophenyl)methyl 6-{2-[2-{[(2,4-dichlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate.
LC/MS t = 4.34, [MH] 602

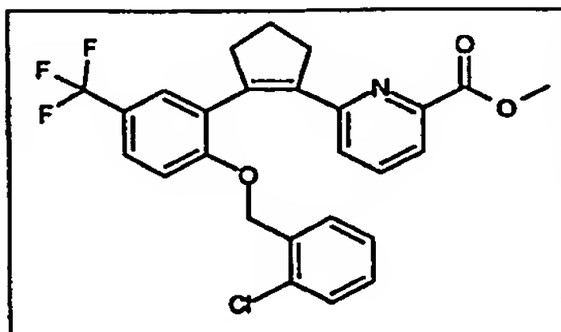
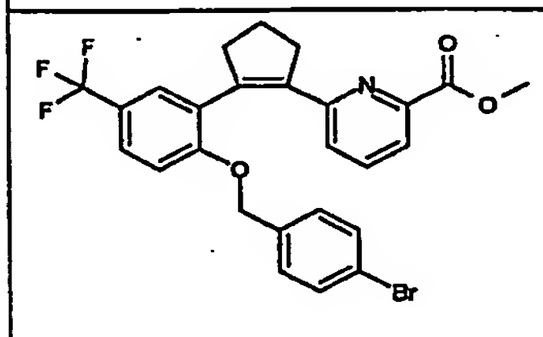
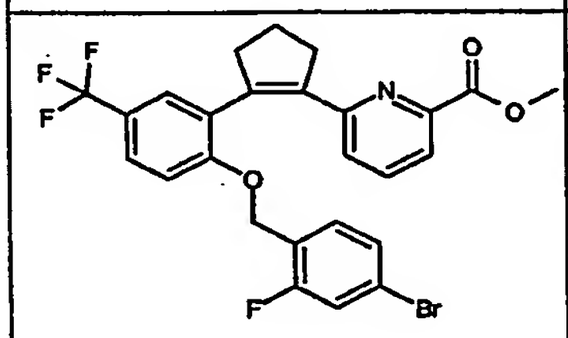
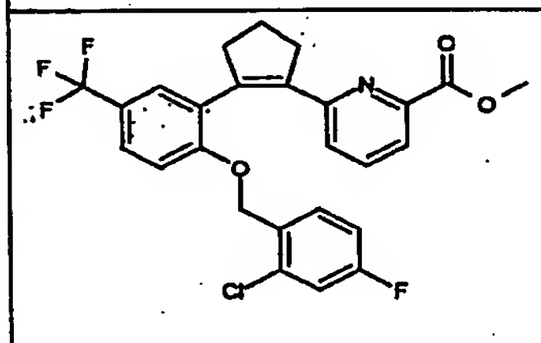
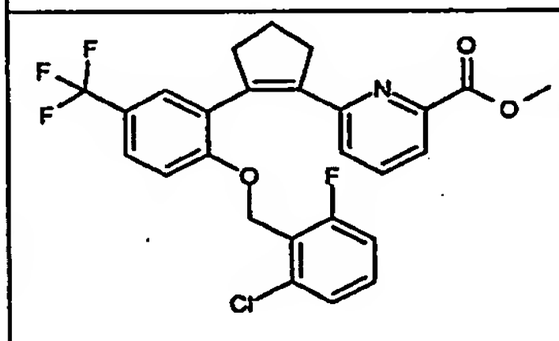
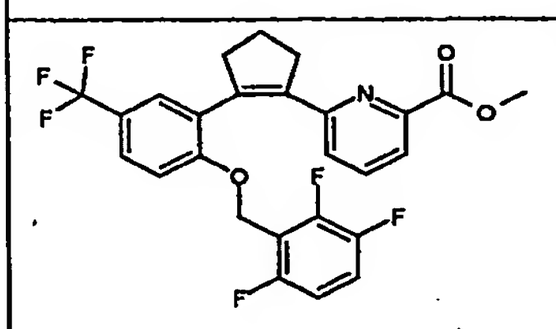
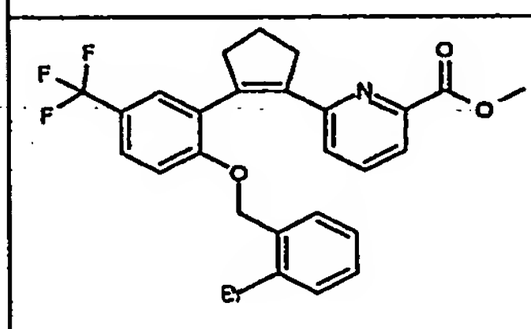
Methyl 5-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylate

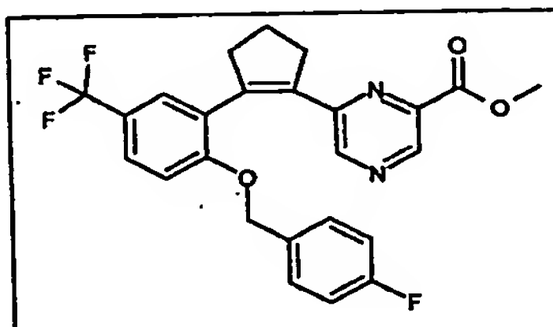
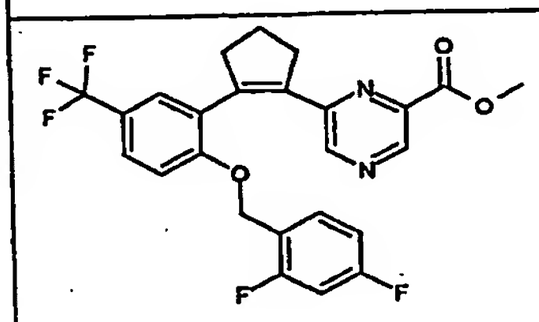
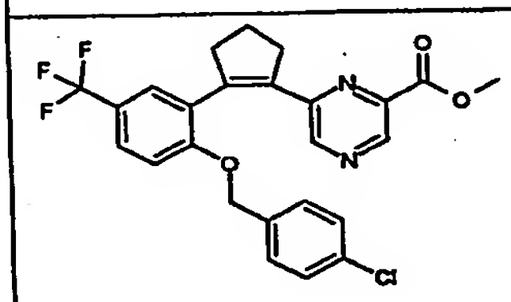
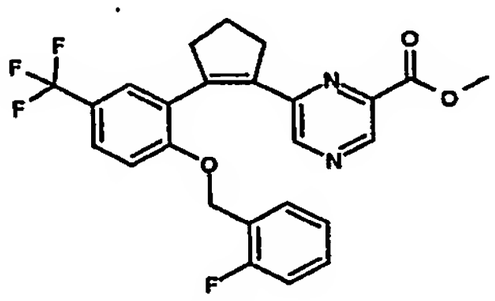
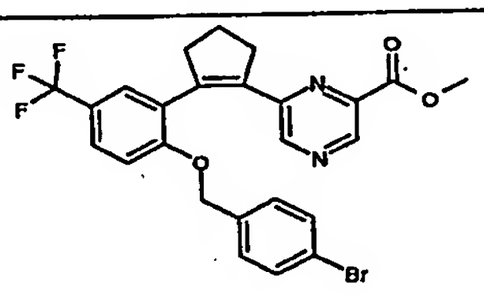
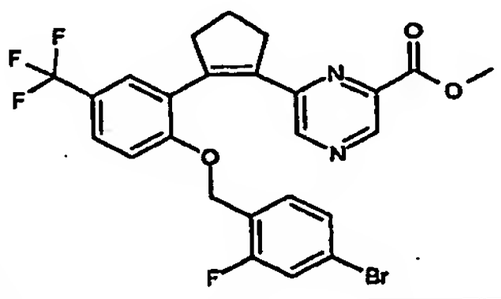
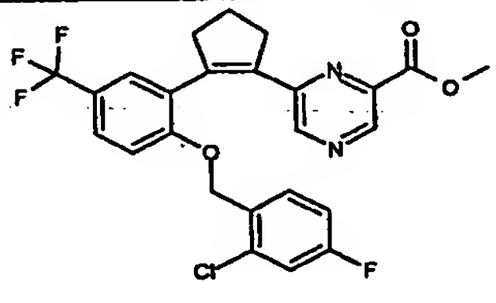


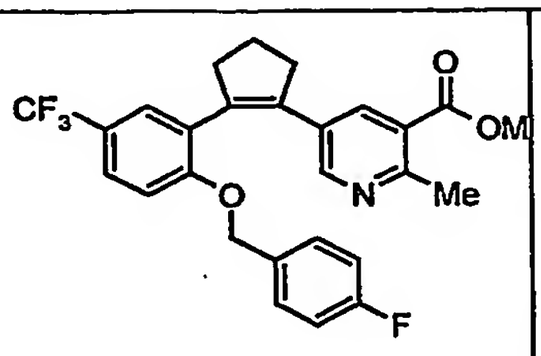
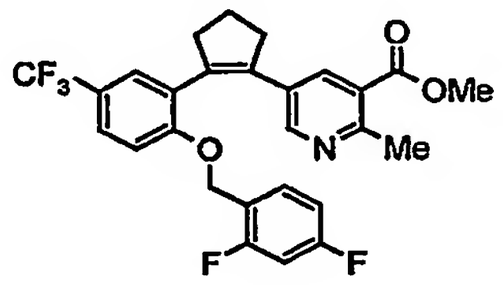
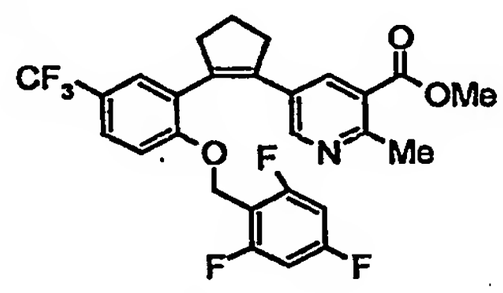
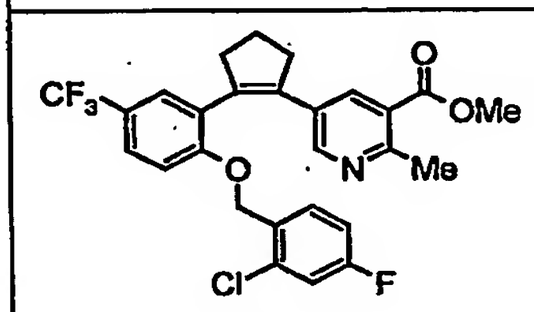
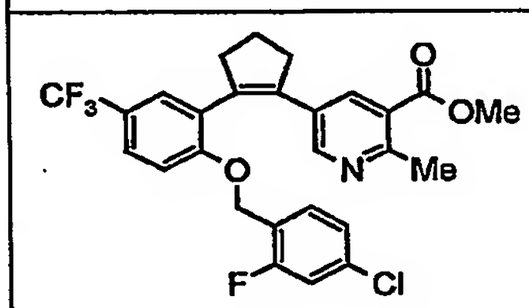
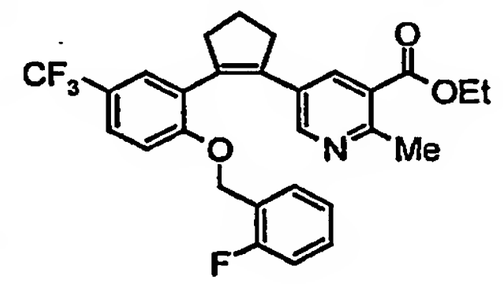
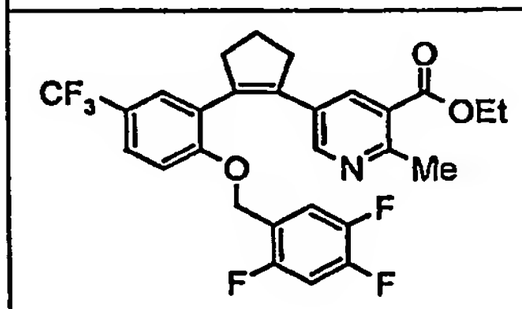
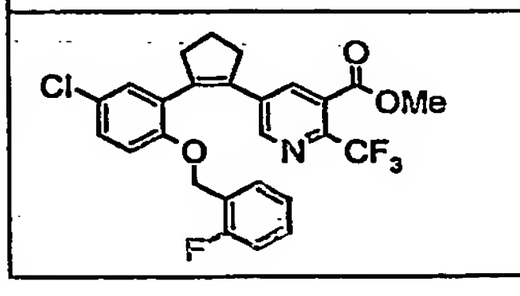
A mixture of methyl 5-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylate (150mg, 0.44mmol), 4-fluorobenzyl bromide (95mg, 0.50mmol) and potassium carbonate (138mg, 1mmol) in acetone (5ml) was stirred and refluxed for 3 hours then cooled, filtered, evaporated and purified by chromatography on silica eluting with ethyl acetate/iso-hexane (15:85) to give a colourless gum (191mg).
LC/MS t=4.07, [MH+] 452.3

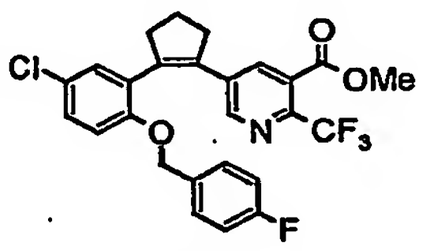
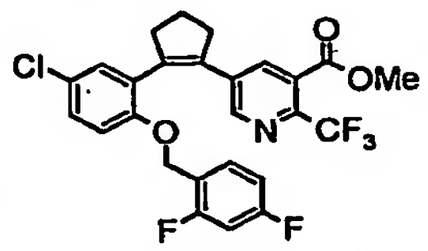
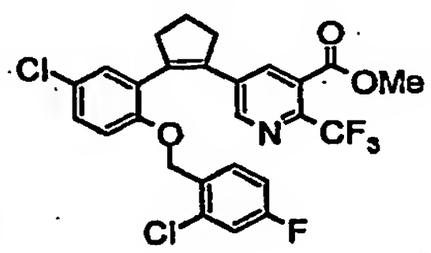
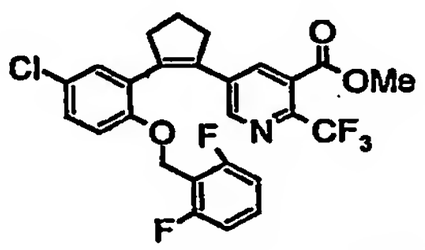
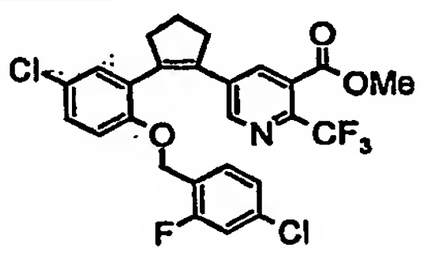
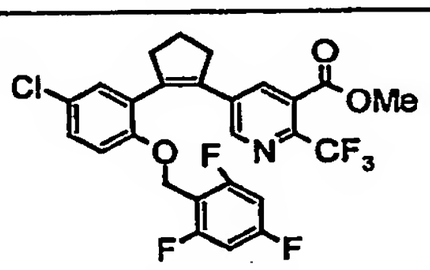
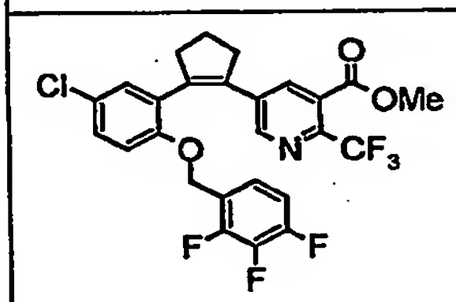
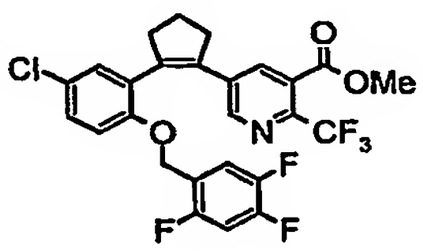
The following intermediates were prepared by a similar route to methyl 5-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylate from the appropriate intermediates.

	Name	LC/MS
	Methyl 5-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylate	Rt=4.09, [MH+] 470.4, 472.3
	Methyl 6-{2-[2-{[(4-chlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 4.16, [MH] 488
	Methyl 6-{2-[2-{[(2,3-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 4.08 [MH] 490
	Methyl 6-[2-(5-(trifluoromethyl)-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.02, [MH] 508
	Methyl 6-{2-[2-{[(4-chloro-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 4.20, [MH] 506
	Methyl 6-{2-[2-{[(2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 4.02, [MH] 472

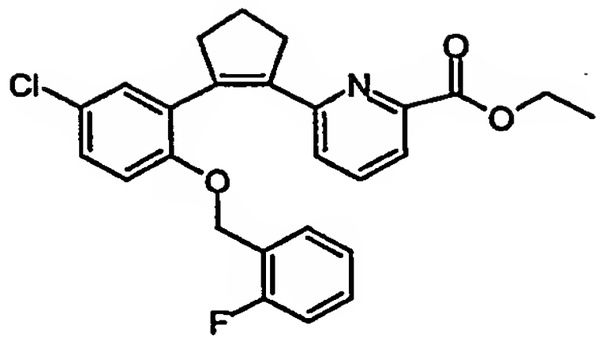
	Methyl 6-{2-[2-{[(2-chlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 4.19, [MH] 488
	Methyl 6-{2-[2-{[(4-bromophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 4.22, [MH] 532, 534
	Methyl 6-{2-[2-{[(4-bromo-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 4.24, [MH] 550, 552
	Methyl 6-{2-[2-{[(2-chloro-4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 4.21, [MH] 506
	Methyl 6-{2-[2-{[(2-chloro-6-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 4.09, [MH] 506
	Methyl 6-[2-(5-(trifluoromethyl)-2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.99, [MH] 508
	Methyl 6-{2-[2-{[(2-bromophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 4.22, [MH] 532, 534

	Methyl 6-{2-[2-{[(4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylate	Rt = 3.92, [MH] 473
	Methyl 6-{2-[2-{[(2,4-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylate	Rt = 3.95, [MH] 491
	Methyl 6-{2-[2-{[(4-chlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylate	Rt = 4.21, [MH] 489
	Methyl 6-{2-[2-{[(2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylate	Rt = 3.95, [MH] 473
	Methyl 6-{2-[2-{[(4-bromophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylate	Rt = 4.15, [MH] 533, 535
	Methyl 6-{2-[2-{[(4-bromo-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylate	Rt = 4.26, [MH] 551, 553
	Methyl 6-{2-[2-{[(2-chloro-4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylate	Rt = 4.23, [MH] 507

	Methyl 5-{2-[2-{[(4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylate	Rt=3.98, [MH+] 486.5
	Methyl 5-{2-[2-{[(2,4-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylate	Rt=4.03 [MH+] 504.4
	Methyl 5-{2-[2-{[(2,4,6-trifluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylate	Rt=4.06 [MH+] 522.4
	Methyl 5-{2-[2-{[(2-chloro-4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylate	Rt=4.22 [MH+] 520.4, 522.4
	Methyl 5-{2-[2-{[(4-chloro-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylate	Rt=4.23 [MH+] 520.4, 522.4
	Ethyl 5-{2-[2-{[(2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylate	Rt=4.41 [MH+] 500.4
	Ethyl 5-{2-[2-{[(2,4,5-trifluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylate	Rt=4.57 [MH+] 536.4
	Methyl 5-[2-(5-chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	Rt=3.95, [MH+] 506.4

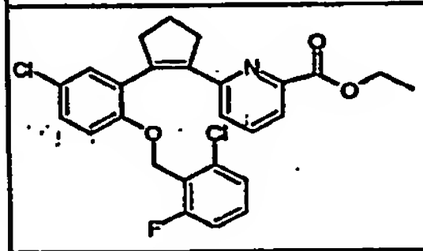
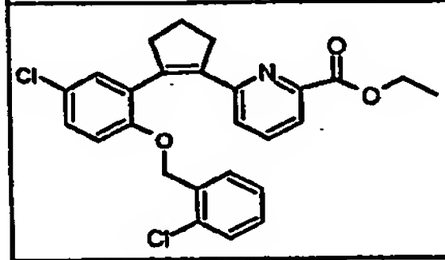
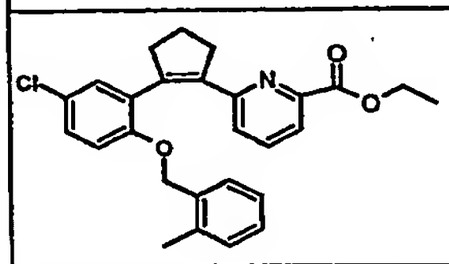
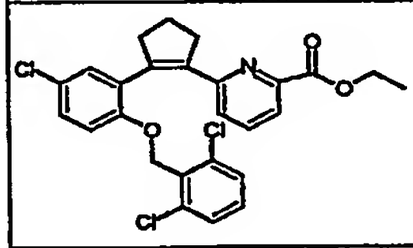
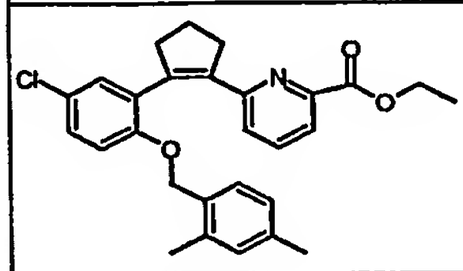
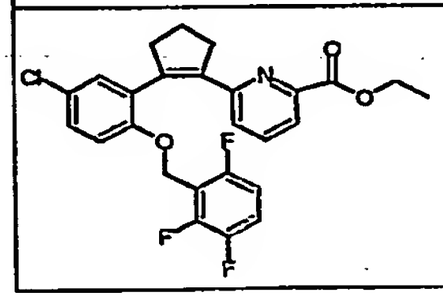
	Methyl 5-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	Rt=3.96 [MH+] 506.4
	Methyl 5-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	Rt=3.95 [MH+] 524.4
	Methyl 5-[2-(5-chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	Rt=4.06 [MH+] 540.3
	Methyl 5-[2-(5-chloro-2-{[(2,6-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	Rt=3.93 [MH+] 524.4
	Methyl 5-[2-(5-chloro-2-{[(4-chloro-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	Rt=4.11 [MH+] 540.3
	Methyl 5-[2-(5-chloro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	Rt=4.02 [MH+] 542.3
	Methyl 5-[2-(5-chloro-2-{[(2,3,4-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	Rt=4.01 [MH+] 542.3
	Methyl 5-[2-(5-chloro-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	Rt=4.04 [MH+] 542.3

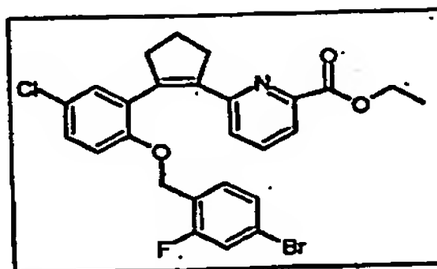
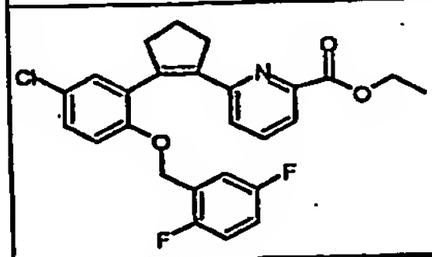
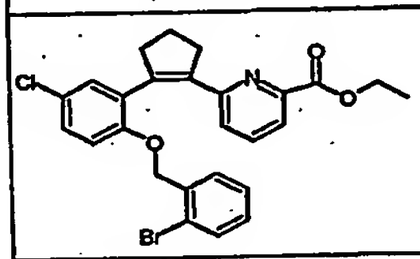
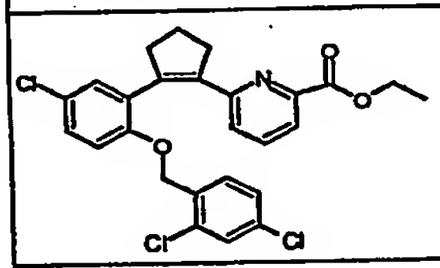
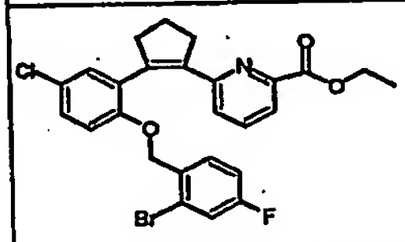
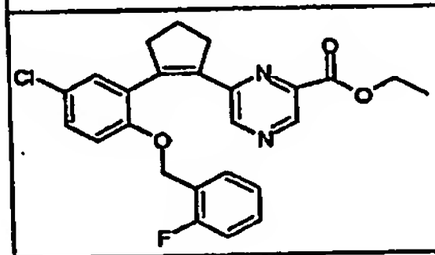
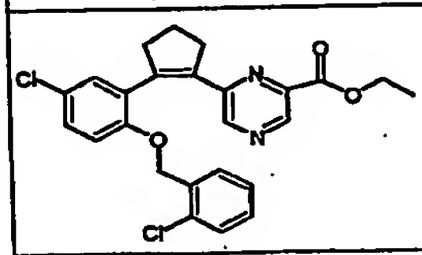
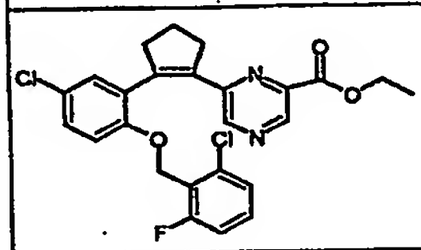
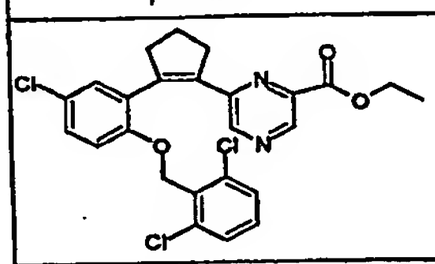
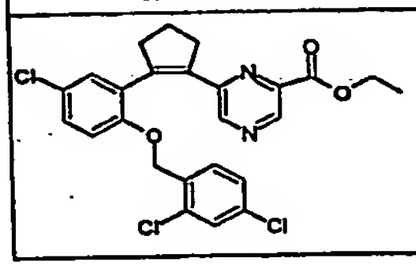
Ethyl 6-[2-(5-chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate

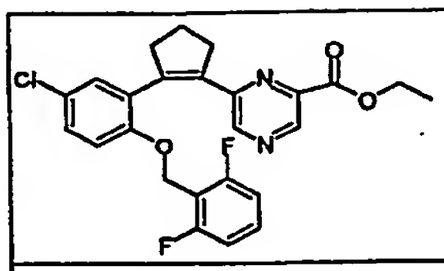
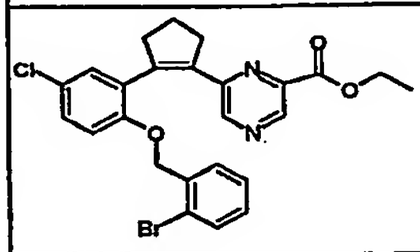
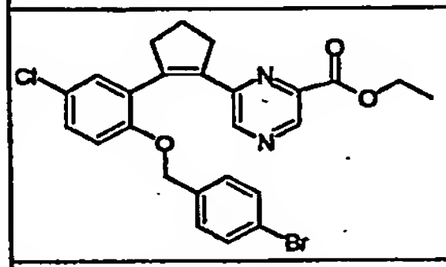
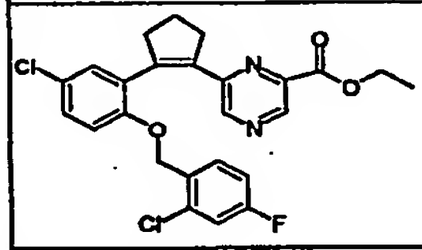
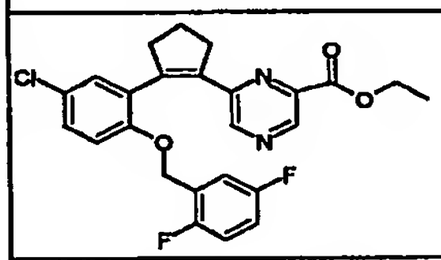
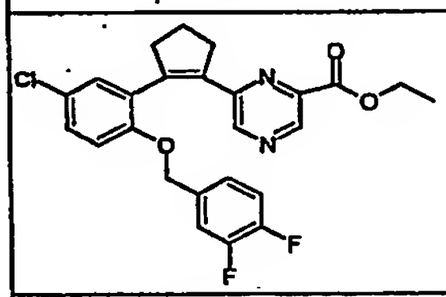
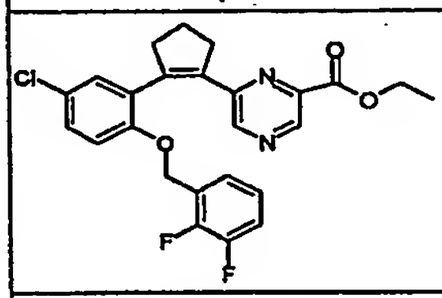
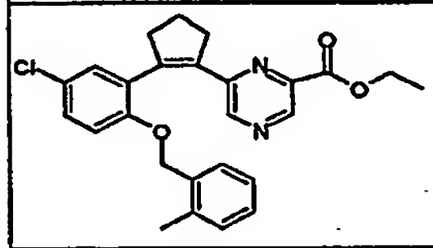
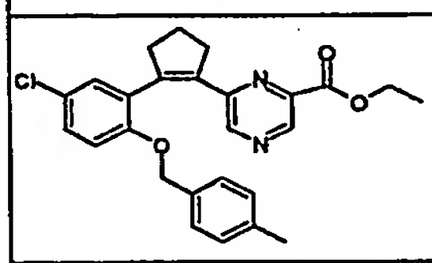
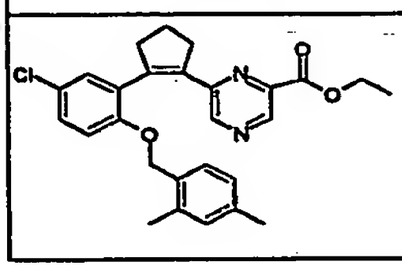


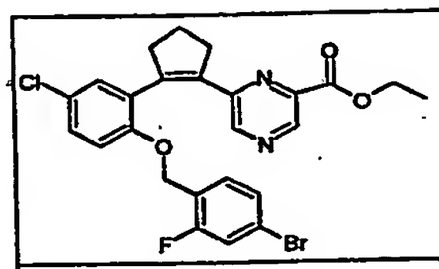
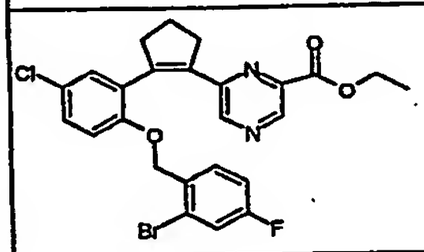
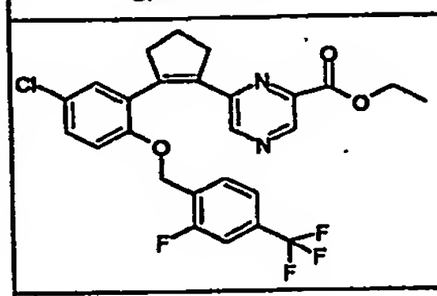
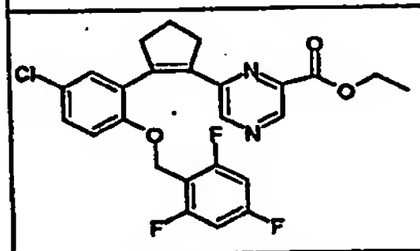
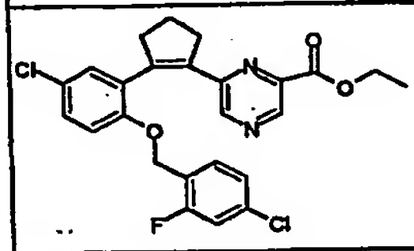
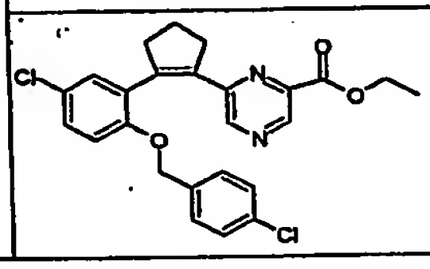
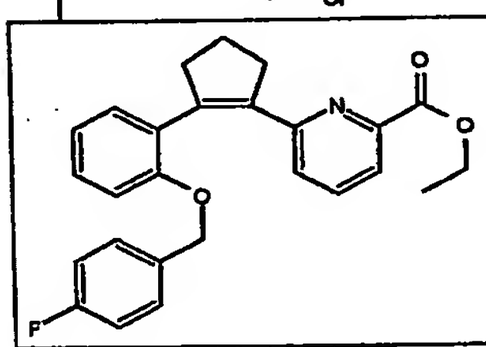
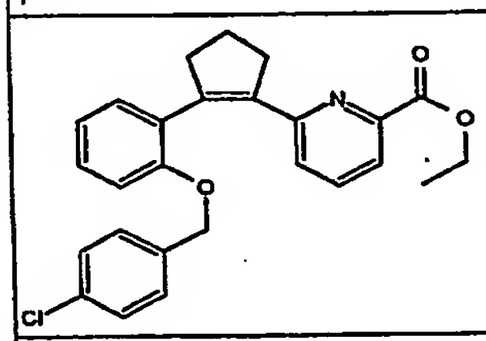
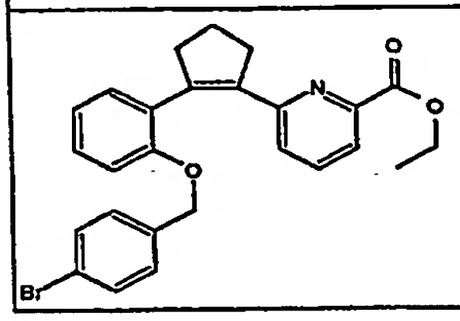
Ethyl 6-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate (100mg, 0.29 mmol), 2-fluorobenzyl bromide (0.035ml, 0.32 mmol) and potassium carbonate (100mg, 0.73 mmol) in acetone (3ml) were refluxed overnight under nitrogen . The reaction mixture was then filtered through hiflo and evaporated to give the title compound. LC/MS: Rt=4.1 [MH] 452,455

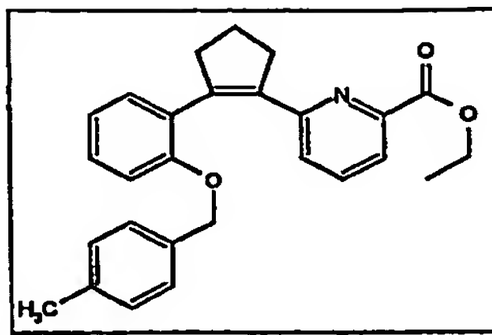
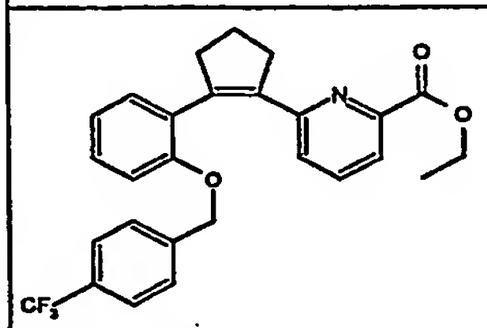
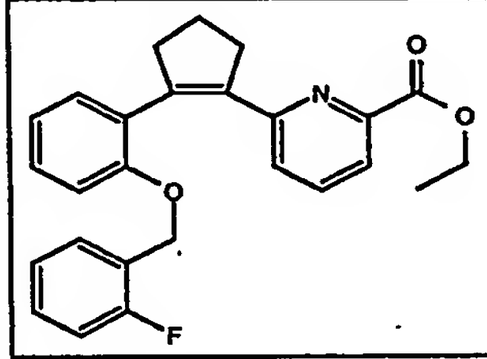
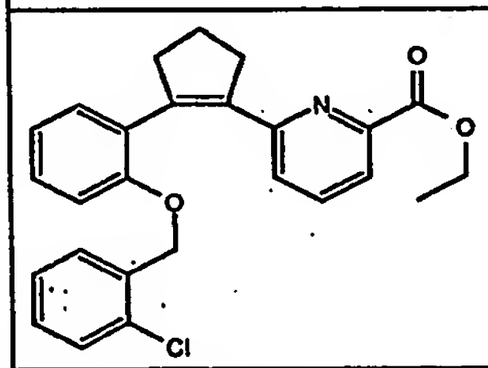
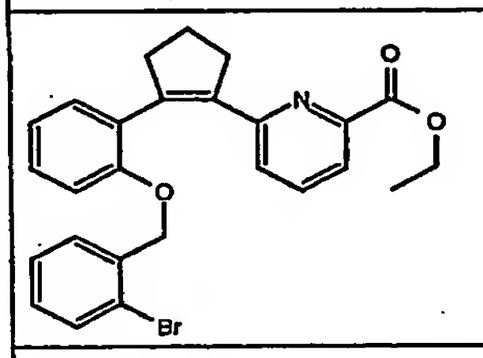
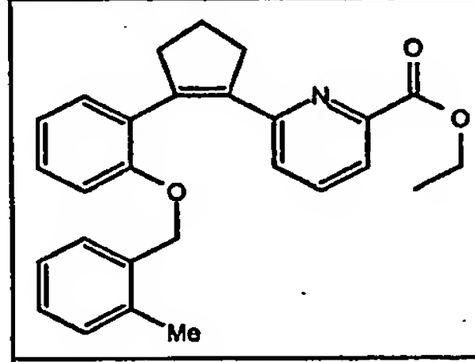
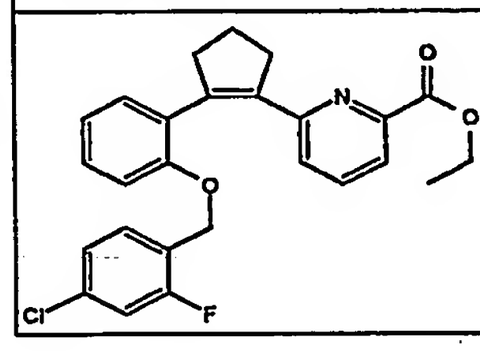
The following intermediates were prepared by a similar route to ethyl 6-[2-(5-chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate from the appropriate intermediates.

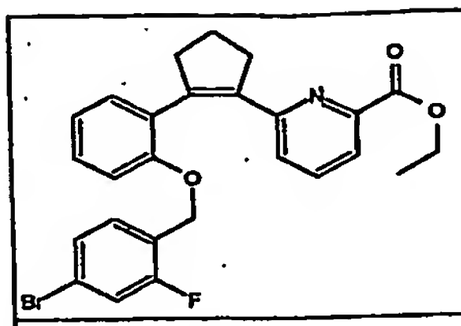
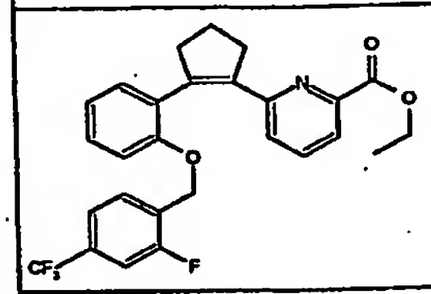
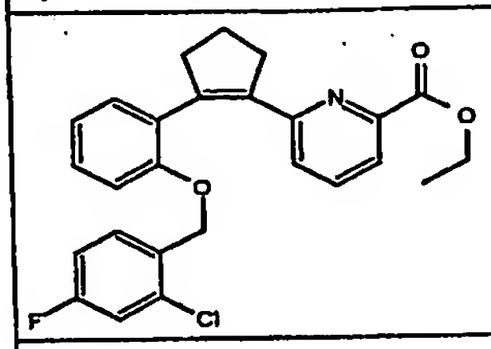
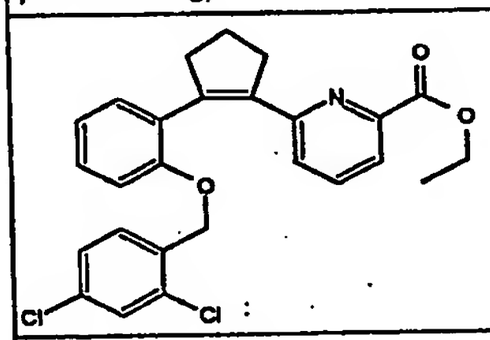
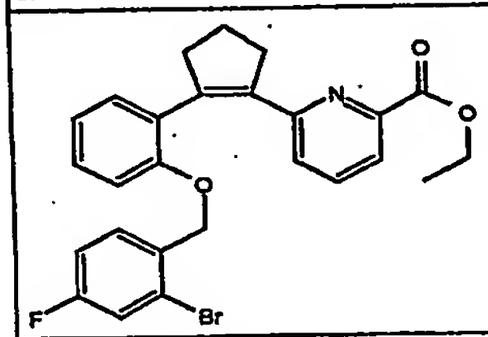
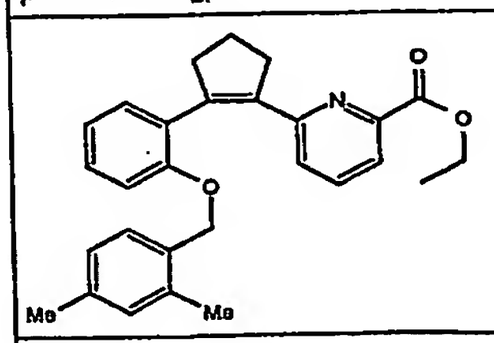
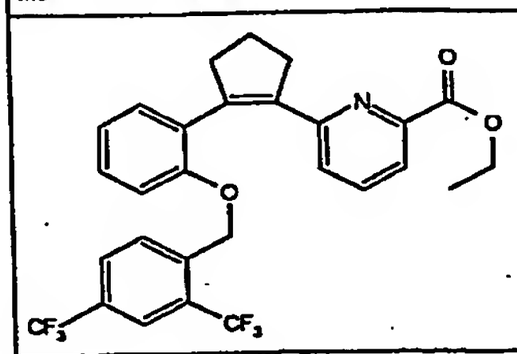
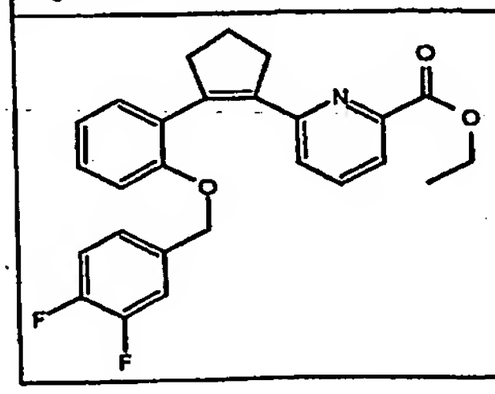
	Name	LC/MS
	Ethyl 6-[2-(5-chloro-2-{[(2-chloro-6-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.20, [MH+] 486,489
	Ethyl 6-[2-(5-chloro-2-{[(2-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.28, [MH+] 468,471
	Ethyl 6-[2-(5-chloro-2-{[(2-methylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.99, [MH+] 448,451
	Ethyl 6-[2-(5-chloro-2-{[(2,6-dichlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.08, [MH+] 504,506
	Ethyl 6-[2-(5-chloro-2-{[(2,4-dimethylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.09, [MH+] 462,464
	Ethyl 6-[2-(5-chloro-2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.11, [MH+] 488,490

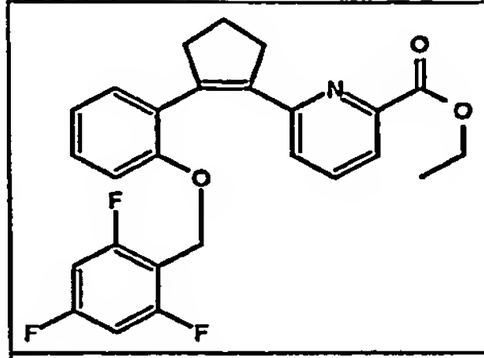
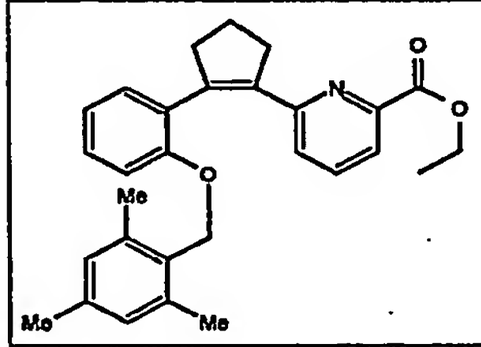
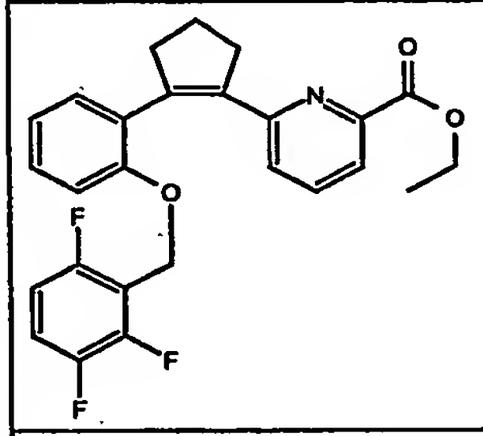
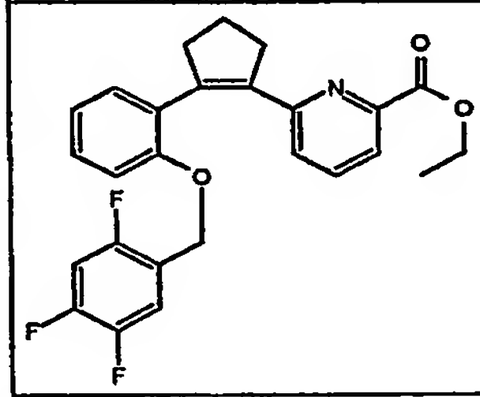
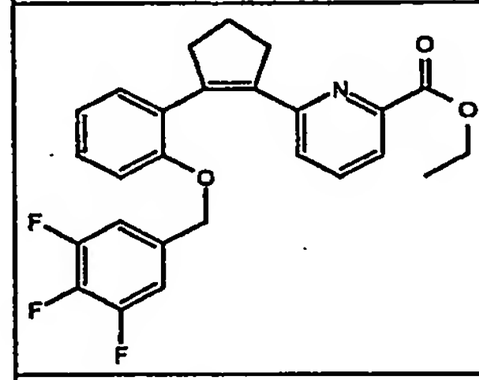
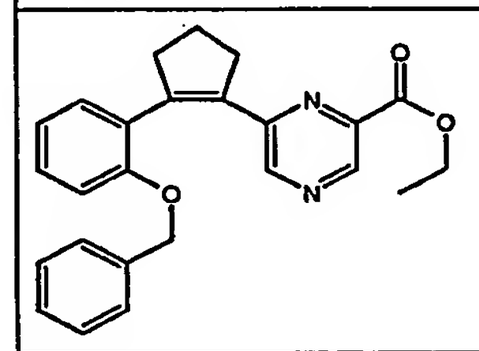
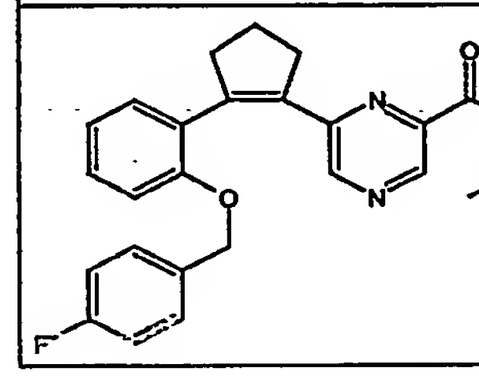
	Ethyl 6-[2-(2-{[(4-bromo-2-fluorophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.11, [MH+] 532,534
	Ethyl 6-[2-(5-chloro-2-{[(2,5-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.95, [MH+] 470,473
	Ethyl 6-[2-(2-{[(2-bromophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.32, [MH+] 514,516
	Ethyl 6-[2-(5-chloro-2-{[(2,4-dichlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.45, [MH+] 504,506
	Ethyl 6-[2-(2-{[(2-bromo-4-fluorophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.33, [MH+] 532,534
	Ethyl 6-[2-(5-chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.81, [MH+] 453,456
	Ethyl 6-[2-(5-chloro-2-{[(2-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.96, [MH+] 469.472
	Ethyl 6-[2-(5-chloro-2-{[(2-chloro-6-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.88, [MH+] 487,490
	Ethyl 6-[2-(5-chloro-2-{[(2,6-dichlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 4.19, [MH+] 505,507
	Ethyl 6-[2-(5-chloro-2-{[(2,4-dichlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 4.32, [MH+] 505,507

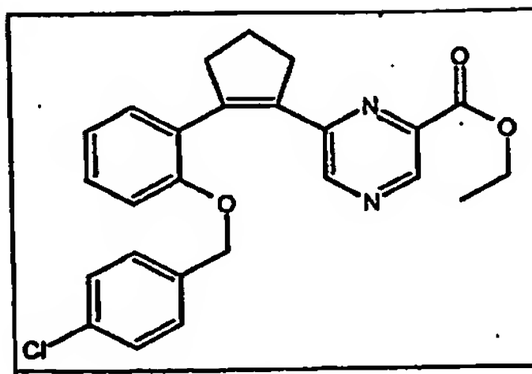
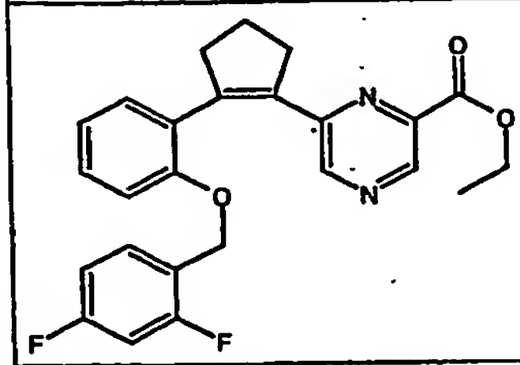
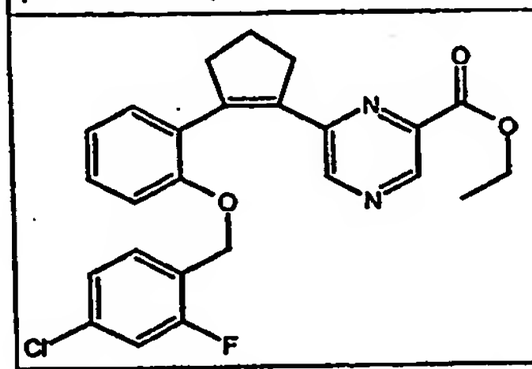
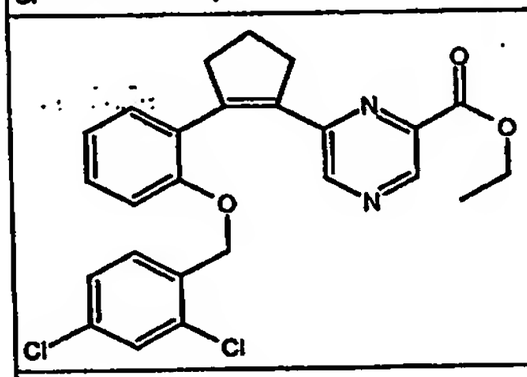
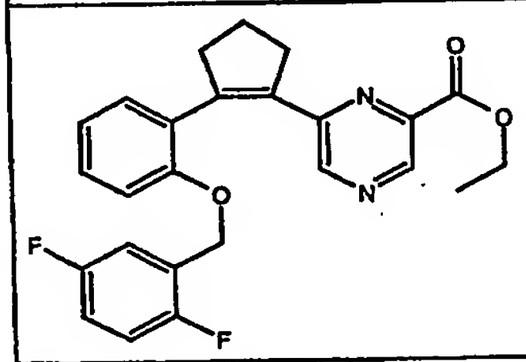
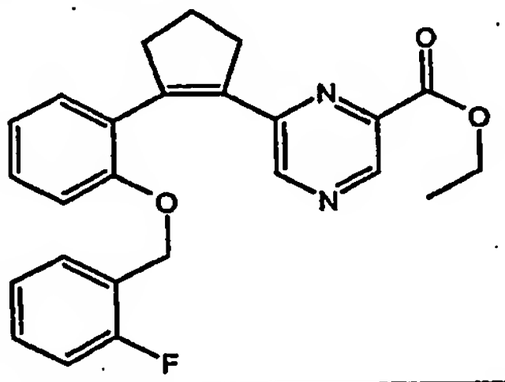
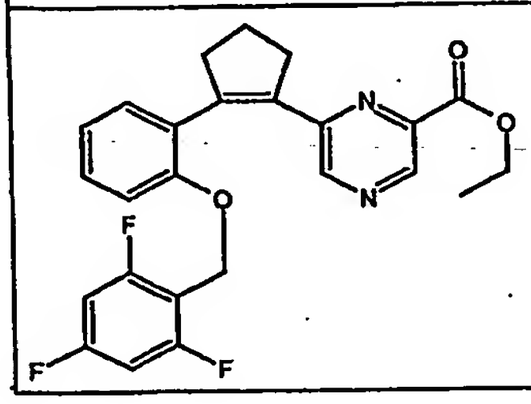
	Ethyl 6-[2-(5-chloro-2-{[(2,6-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.97, [MH+] 473,474
	Ethyl 6-[2-(2-{[(2-bromophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.99, [MH+] 515,517
	Ethyl 6-[2-(2-{[(4-bromophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.98, [MH+] 515,517
	Ethyl 6-[2-(5-chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.97, [MH+] 487,490
	Ethyl 6-[2-(5-chloro-2-{[(2,5-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.83, [MH+] 471,473
	Ethyl 6-[2-(5-chloro-2-{[(3,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.84, [MH+] 471,473
	Ethyl 6-[2-(5-chloro-2-{[(2,3-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.82, [MH+] 471,473
	Ethyl 6-[2-(5-chloro-2-{[(2-methylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 4.34, [MH+] 449
	Ethyl 6-[2-(5-chloro-2-{[(4-methylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 4.37, [MH+] 449,451
	Ethyl 6-[2-(5-chloro-2-{[(2,4-dimethylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 4.48, [MH+] 463

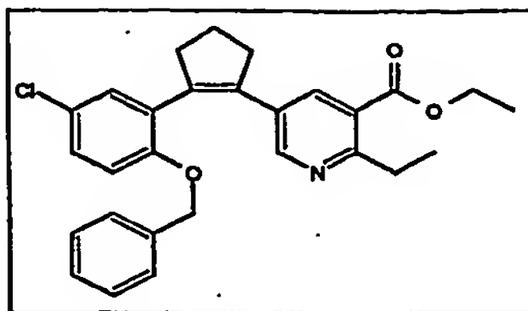
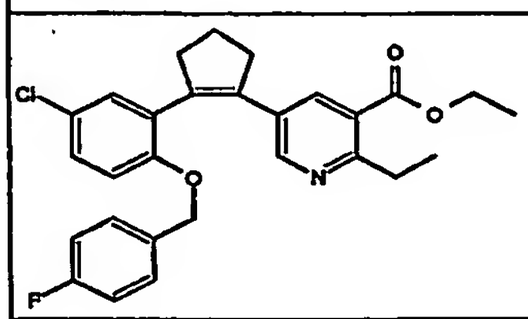
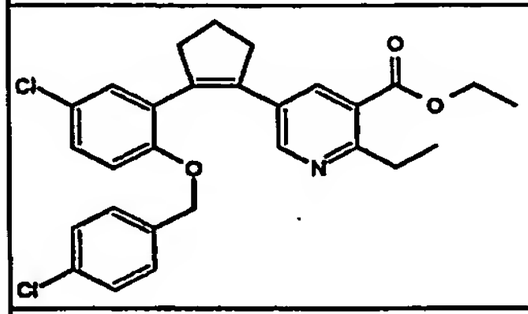
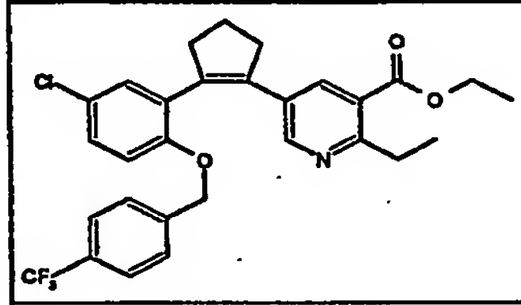
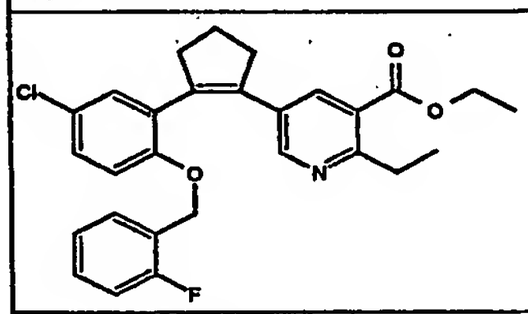
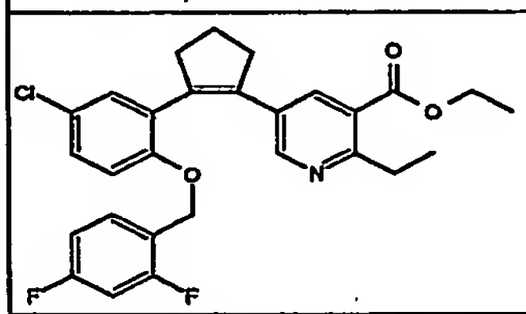
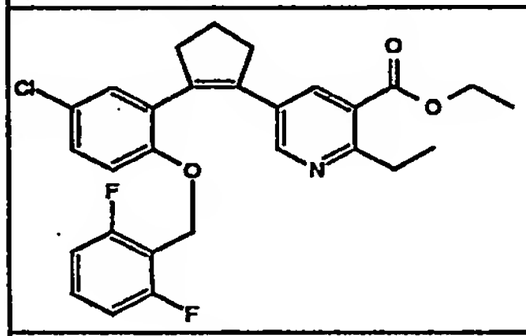
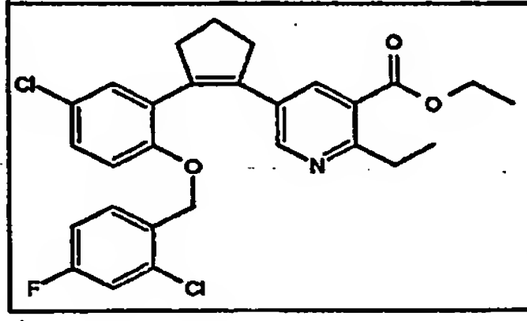
	Ethyl 6-[2-(2-{[(4-bromo-2-fluorophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 4.47, [MH+] 533,535
	Ethyl 6-[2-(2-{[(2-bromo-4-fluorophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 4.48, [MH+] 533 [MH-] 531
	Ethyl 6-{2-[5-chloro-2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylate	Rt = 4.46, [MH+] 521,523
	Ethyl 6-[2-(5-chloro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 4.23, [MH+] 489,491
	Ethyl 6-[2-(5-chloro-2-{[(4-chloro-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 4.23, [MH+] 487
	Ethyl 6-[2-(5-chloro-2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 4.23, [MH+] 469,471
	Ethyl 6-[2-(2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.99 min, [M+H] 418.
	Ethyl 6-[2-(2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.16 min, [M+H] 434.
	Ethyl 6-[2-(2-{[(4-bromophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.21 min, [M+H] 480.

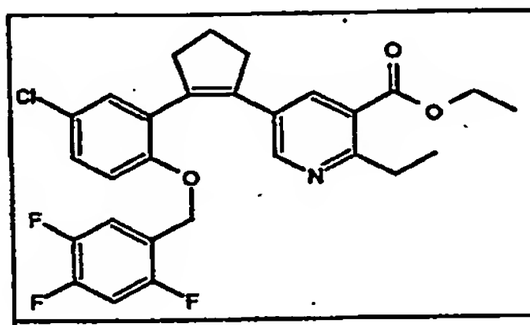
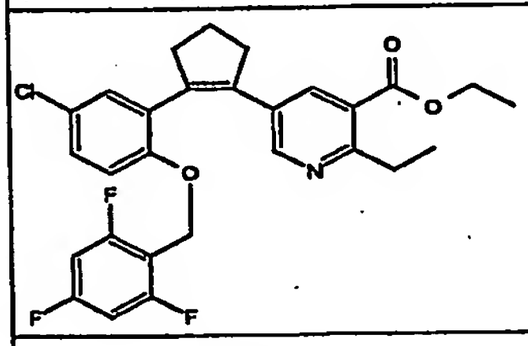
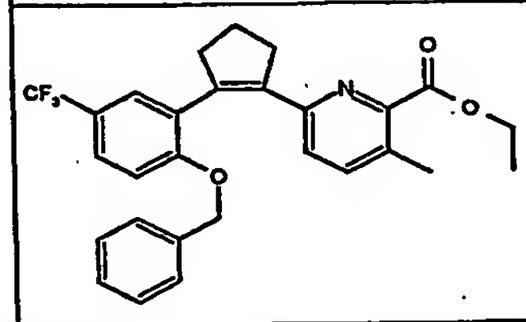
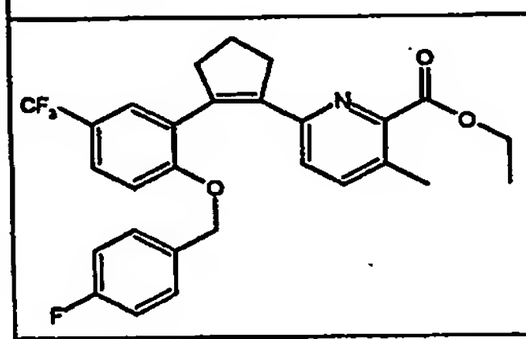
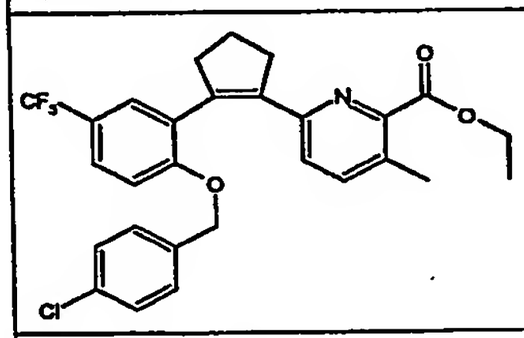
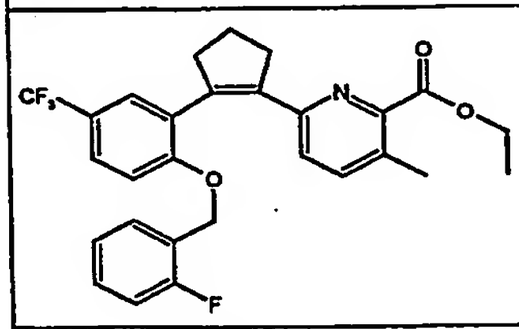
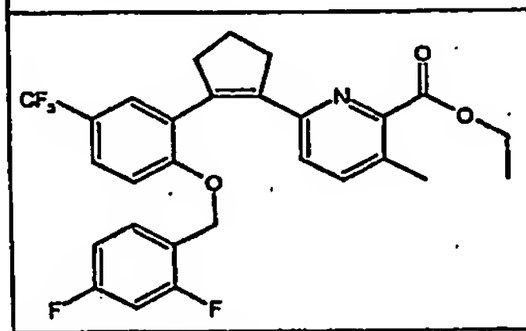
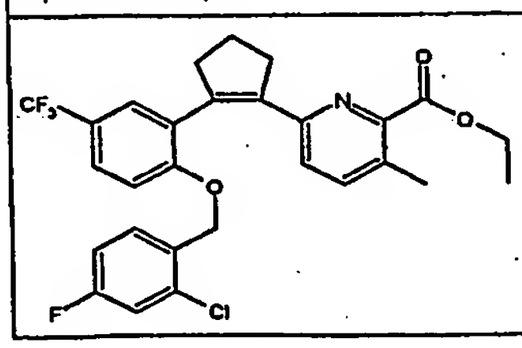
	Ethyl 6-[2-(2-{[(4-methylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.11 min, [M+H] 414.
	Ethyl 6-{2-[2-({[4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 4.17 min, [M+H] 486.
	Ethyl 6-[2-(2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.99 min, [M+H] 418.
	Ethyl 6-[2-(2-{[(2-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.18 min, [M+H] 434.
	Ethyl 6-[2-(2-{[(2-bromophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.18 min, [M+H] 480.
	Ethyl 6-[2-(2-{[(2-methylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.06 min, [M+H] 414.
	Ethyl 6-[2-(2-{[(4-chloro-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.18 min, [M+H] 452.

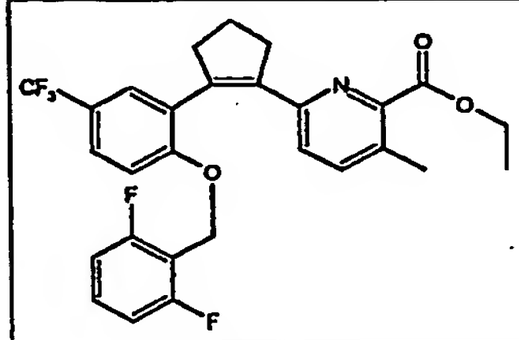
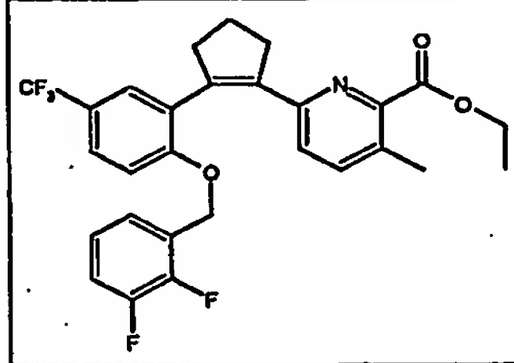
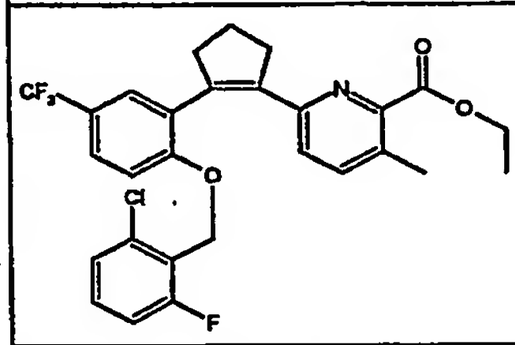
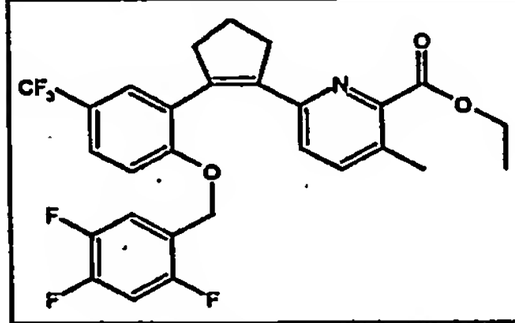
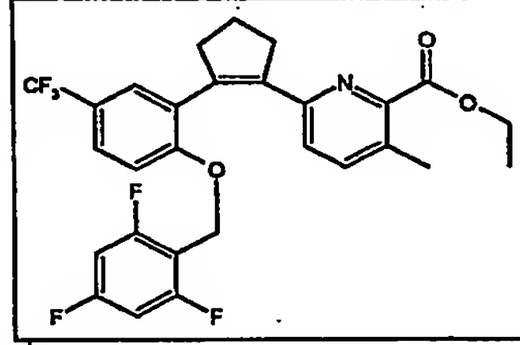
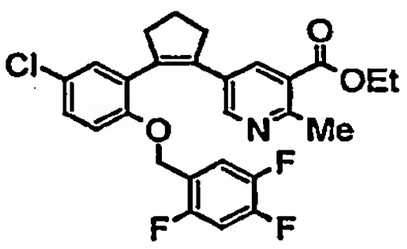
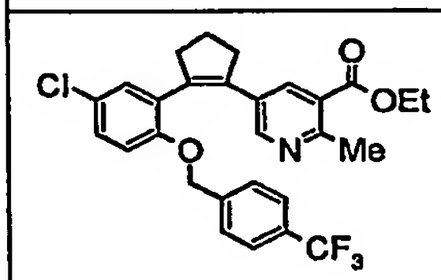
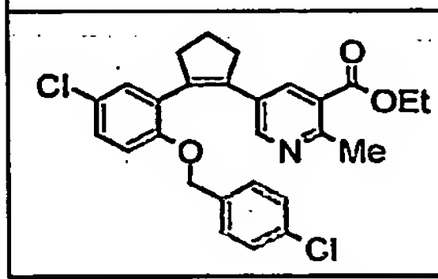
	Ethyl 6-[2-(2-{[(4-bromo-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.21 min, [M+H] 498.
	Ethyl 6-{2-[2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 4.22 min, [M+H] 486.
	Ethyl 6-[2-(2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.21 min, [M+H] 452.
	Ethyl 6-[2-(2-{[(2,4-dichlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.43 min, [M+H] 468.
	Ethyl 6-[2-(2-{[(2-bromo-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.26 min, [M+H] 498.
	Ethyl 6-[2-(2-{[(2,4-dimethylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.22 min, [M+H] 428.
	Ethyl 6-{2-[2-({[2,4-bis(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 4.43 min, [M+H] 536.
	Ethyl 6-[2-(2-{[(3,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.03 min, [M+H] 436.

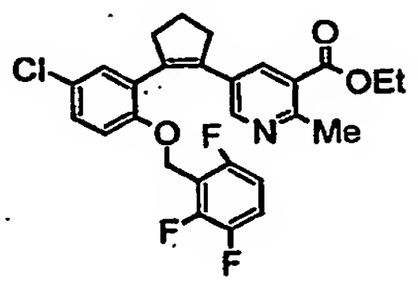
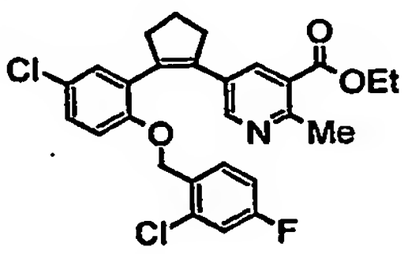
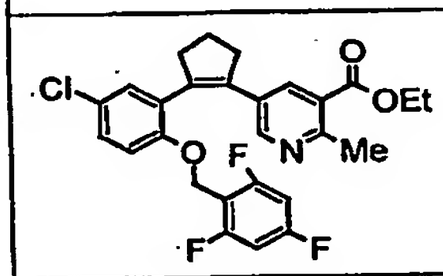
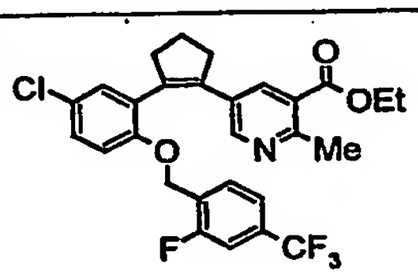
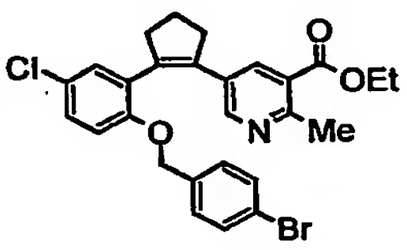
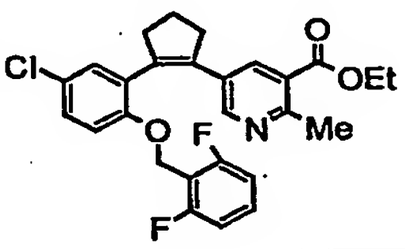
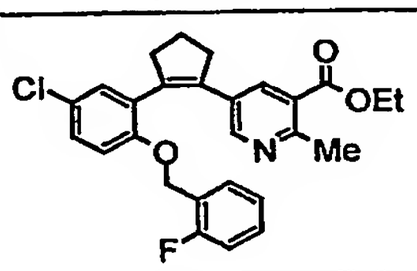
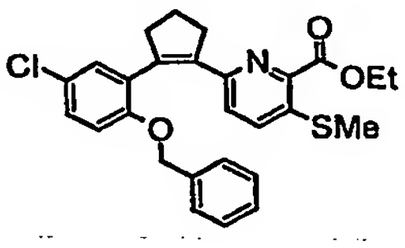
	Ethyl 6-[2-(2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.98 min, [M+H] 454.
	Ethyl 6-[2-(2-{[(2,4,6-trimethylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.31 min, [M+H] 442.
	Ethyl 6-[2-(2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.95 min, [M+H] 454.
	Ethyl 6-[2-(2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.08 min, [M+H] 454.
	Ethyl 6-[2-(2-{[(3,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.12 min, [M+H] 454.
	Ethyl 6-(2-{2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyrazinecarboxylate	Rt = 3.83 min, [M+H] 401.
	Ethyl 6-[2-(2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.86 min, [M+H] 419.

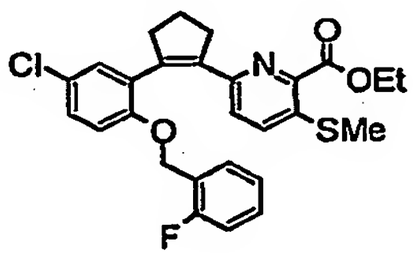
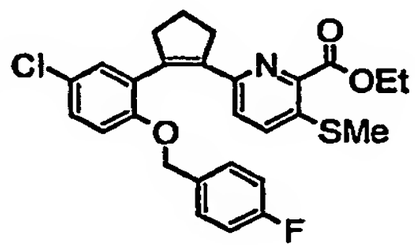
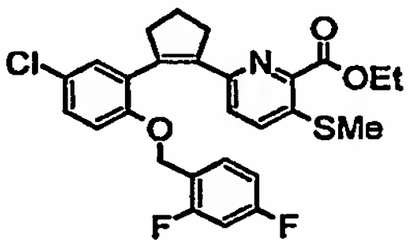
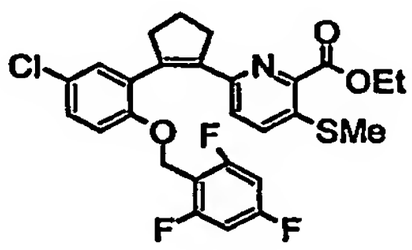
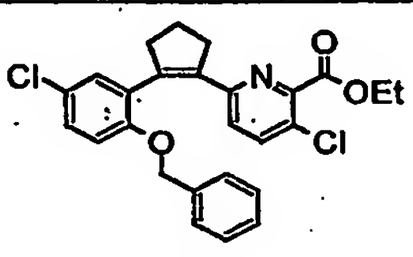
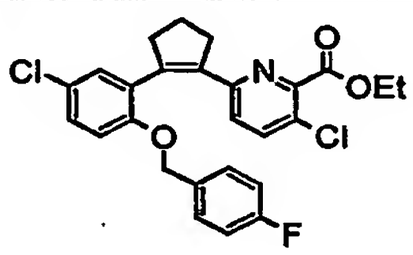
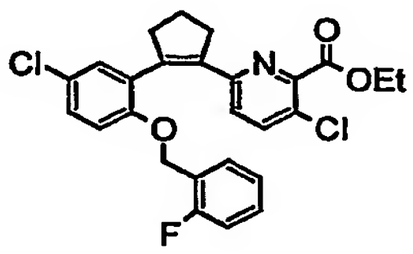
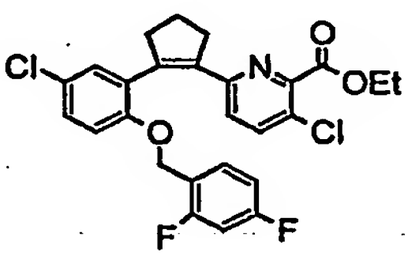
	Ethyl 6-[2-(2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.75 min, [M+H] 437.
	Ethyl 6-[2-(2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 4.03 min, [M+H] 435.
	Ethyl 6-[2-(2-{[(4-chloro-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 4.07 min, [M+H] 453.
	Ethyl 6-[2-(2-{[(2,4-dichlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 4.21 min, [M+H] 469.
	Ethyl 6-[2-(2-{[(2,5-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.89 min, [M+H] 437.
	Ethyl 6-[2-(2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.85 min, [M+H] 419.
	Ethyl 6-[2-(2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	Rt = 3.84 min, [M+H] 455.

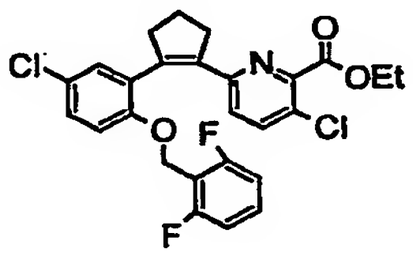
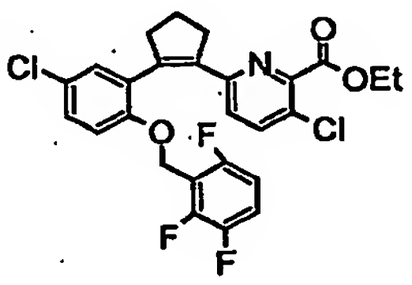
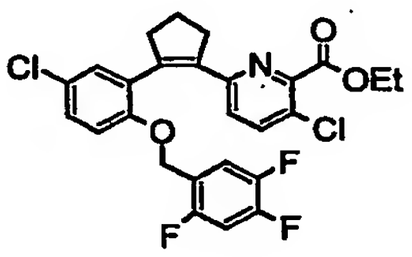
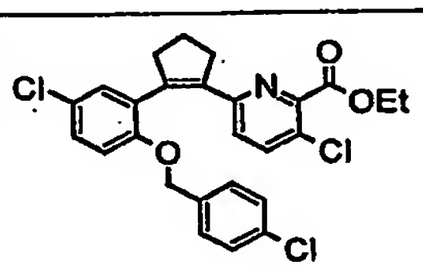
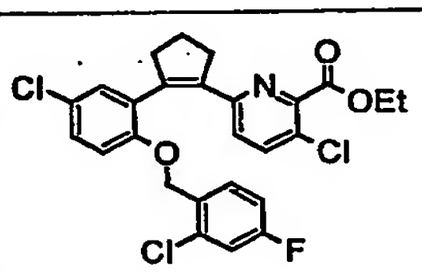
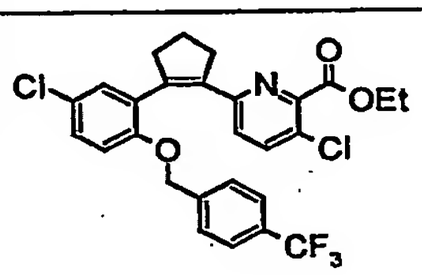
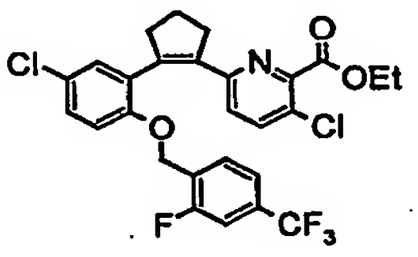
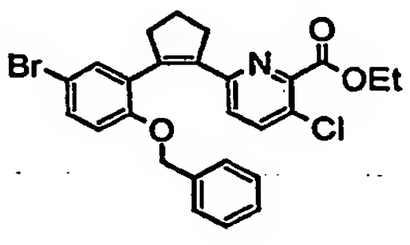
	Ethyl 5-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-ethyl-3-pyridinecarboxylate	Rt = 4.35 min, [M+H] 462.
	Ethyl 5-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylate	Rt = 4.34 min, [M+H] 480.
	Ethyl 5-[2-(5-chloro-2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylate	Rt = 4.51 min, [M+H] 496.
	Ethyl 5-{2-[5-chloro-2-({[4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-ethyl-3-pyridinecarboxylate	Rt = 4.51 min, [M+H] 530.
	Ethyl 5-[2-(5-chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylate	Rt = 4.35 min, [M+H] 480.
	Ethyl 5-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylate	Rt = 4.37 min, [M+H] 498.
	Ethyl 5-[2-(5-chloro-2-{[(2,6-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylate	Rt = 4.29 min, [M+H] 498.
	Ethyl 5-[2-(5-chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylate	Rt = 4.54 min, [M+H] 514.

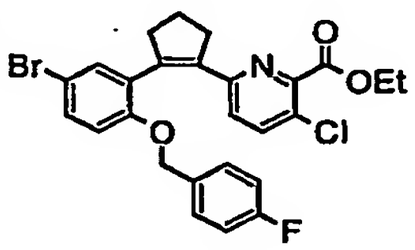
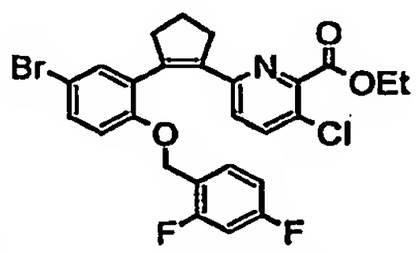
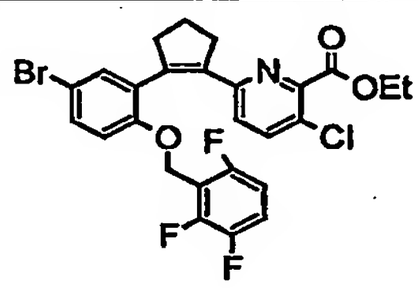
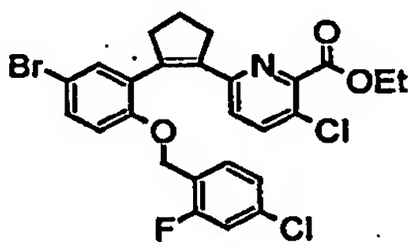
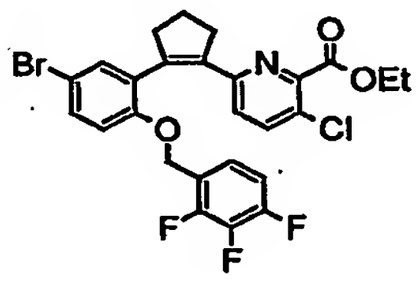
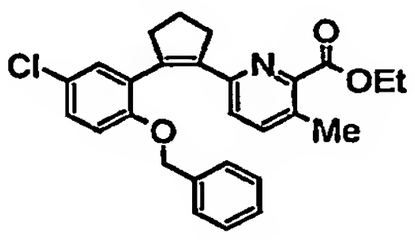
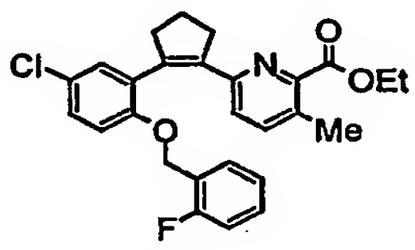
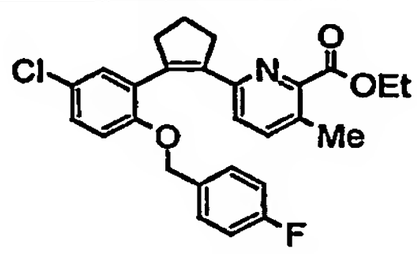
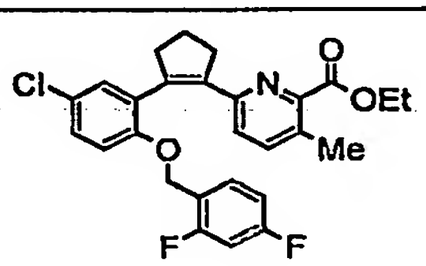
	Ethyl 5-[2-(5-chloro-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylate	Rt = 4.40 min, [M+H] 516.
	Ethyl 5-[2-(5-chloro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylate	Rt = 4.33 min, [M+H] 516.
	Ethyl 3-methyl-6-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 4.35 min, [M+H] 482.
	Ethyl 6-{2-[2-{[(4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylate	Rt = 4.36 min, [M+H] 500.
	Ethyl 6-{2-[2-{[(4-chlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylate	Rt = 4.49 min, [M+H] 516.
	Ethyl 6-{2-[2-{[(2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylate	Rt = 4.39 min, [M+H] 500.
	Ethyl 6-{2-[2-{[(2,4-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylate	Rt = 4.43 min, [M+H] 518.
	Ethyl 6-{2-[2-{[(2-chloro-4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylate	Rt = 4.58 min, [M+H] 534.

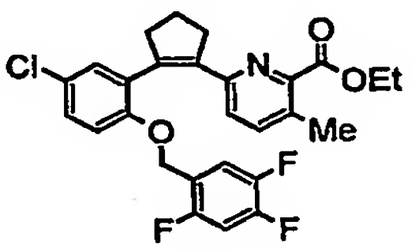
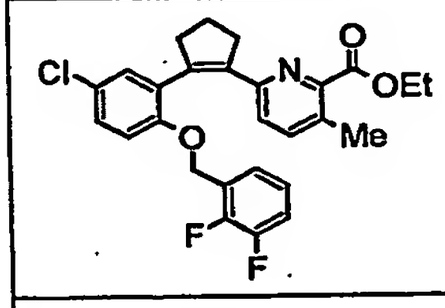
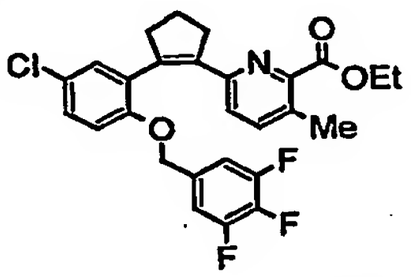
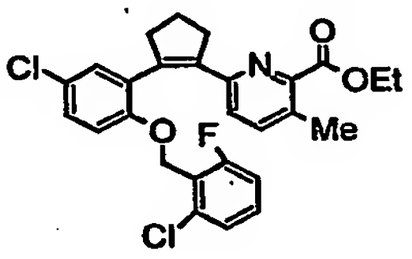
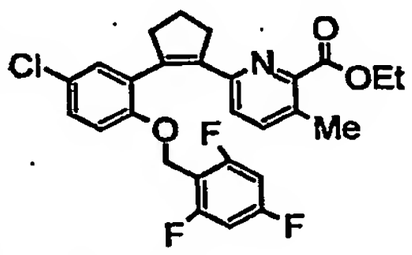
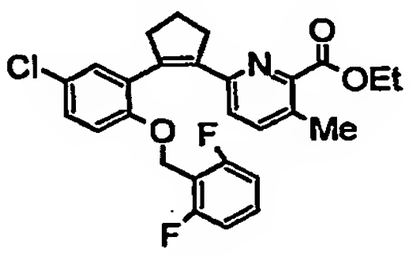
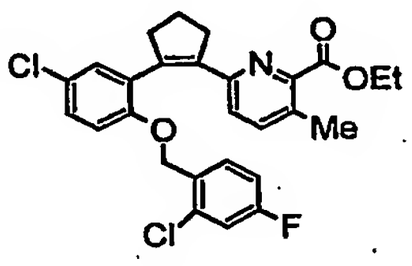
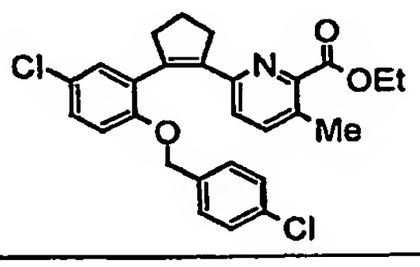
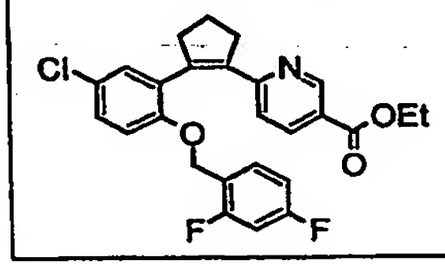
	Ethyl 6-{2-[2-{[(2,6-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylate	Rt = 4.34 min, [M+H] 518.
	Ethyl 6-{2-[2-{[(2,3-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylate	Rt = 4.39 min, [M+H] 518.
	Ethyl 6-{2-[2-{[(2-chloro-6-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylate	Rt = 4.44 min, [M+H] 534.
	Ethyl 3-methyl-6-[2-(5-(trifluoromethyl)-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.30 min, [M+H] 536.
	Ethyl 3-methyl-6-[2-(5-(trifluoromethyl)-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 4.30 min, [M+H] 536.
	Ethyl 5-[2-(5-chloro-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylate	Rt=4.24, [MH+] 502.4
	Ethyl 5-{2-[5-chloro-2-({[4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylate	Rt=4.35 [MH+] 516.5, 518.4
	Ethyl 5-[2-(5-chloro-2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylate	Rt=4.35 [MH+] 482.4

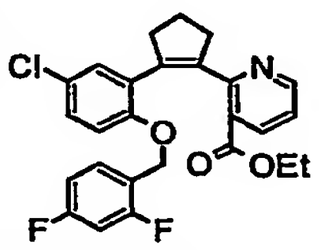
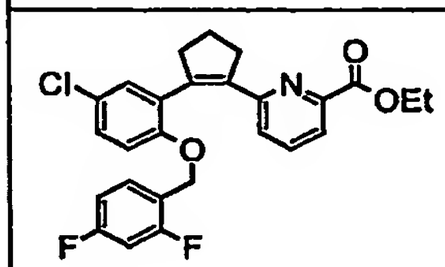
	Ethyl 5-[2-(5-chloro-2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylate	Rt=4.13 [MH+] 502.4, 504.4
	Ethyl 5-[2-(5-chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylate	Rt=4.38 [MH+] 500.4
	Ethyl 5-[2-(5-chloro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylate	Rt=4.16 [MH+] 502.4, 504.4
	Ethyl 5-{2-[5-chloro-2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylate	Rt=4.38 [MH+] 534.5, 536.5
	Ethyl 5-[2-(2-{[(4-bromophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylate	Rt=4.40 [MH+] 528.4, 530.4
	Ethyl 5-[2-(5-chloro-2-{[(2,6-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylate	Rt=4.13 [MH+] 484.4, 486.5
	Ethyl 5-[2-(5-chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylate	Rt=4.18 [MH+] 466.5, 468.5
	Ethyl 6-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-3-(methylthio)-2-pyridinecarboxylate	Rt=4.24, [MH+] 480.4, 482.4

	Ethyl 6-[2-(5-chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-(methylthio)-2-pyridinecarboxylate	Rt=4.27 [MH+] 498.4, 500.4
	Ethyl 6-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-(methylthio)-2-pyridinecarboxylate	Rt=4.27 [MH+] 498.4, 500.4
	Ethyl 6-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-(methylthio)-2-pyridinecarboxylate	Rt=4.31 [MH+] 516.4, 518.4
	Ethyl 6-[2-(5-chloro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-(methylthio)-2-pyridinecarboxylate	Rt=4.27 [MH+] 534.4, 536.4
	Ethyl 3-chloro-6-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylate	R t=4.50, [MH+] 468.4
	Ethyl 3-chloro-6-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt=4.49 [MH+] 486.4
	Ethyl 3-chloro-6-[2-(5-chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt=4.45 [MH+] 486.4
	Ethyl 3-chloro-6-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt=4.52 [MH+] 504.4

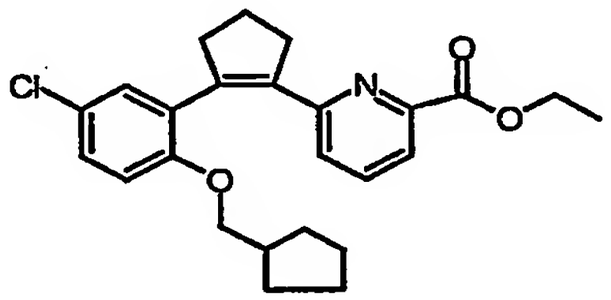
	Ethyl 3-chloro-6-[2-(5-chloro-2-{[(2,6-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt=4.46 [MH+] 504.4
	Ethyl 3-chloro-6-[2-(5-chloro-2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt=4.46 [MH+] 522.4
	Ethyl 3-chloro-6-[2-(5-chloro-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt=4.55 [MH+] 522.4
	Ethyl 3-chloro-6-[2-(5-chloro-2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt=4.65 [MH+] 502.4
	Ethyl 3-chloro-6-[2-(5-chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt=4.70 [MH+] 522.3
	Ethyl 3-chloro-6-{2-[5-chloro-2-({[4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt=4.66 [MH+] 536.4
	Ethyl 3-chloro-6-{2-[5-chloro-2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt=4.69 [MH+] 554.4
	Ethyl 6-(2-{5-bromo-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-3-chloro-2-pyridinecarboxylate	Rt=4.54, [MH+] 514.4

	Ethyl 6-[2-(5-bromo-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-chloro-2-pyridinecarboxylate	Rt=4.10 [MH+] 532.3
	Ethyl 6-[2-(5-bromo-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-chloro-2-pyridinecarboxylate	Rt=4.57 [MH+] 550.3
	Ethyl 6-[2-(5-bromo-2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-chloro-2-pyridinecarboxylate	Rt=4.35 [MH+] 568.3
	Ethyl 6-[2-(5-bromo-2-{[(4-chloro-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-chloro-2-pyridinecarboxylate	Rt=4.60 [MH+] 566.3, 568.3
	Ethyl 6-[2-(5-bromo-2-{[(2,3,4-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-chloro-2-pyridinecarboxylate	Rt=4.52 [MH+] 568.3
	Ethyl 6-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-3-methyl-2-pyridinecarboxylate	Rt=4.40, [MH+] 448.5, 450.4
	Ethyl 6-[2-(5-chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylate	Rt=4.42 [MH+] 466.5, 468.4
	Ethyl 6-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylate	Rt=4.26 [MH+] 466.4, 468.4
	Ethyl 6-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylate	Rt=4.09 [MH+] 484.4, 486.4

	Ethyl 6-[2-(5-chloro-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylate	Rt=4.49 [MH+] 502.4, 504.4
	Ethyl 6-[2-(5-chloro-2-{[(2,3-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylate	Rt=4.44 [MH+] 484.4, 486.4
	Ethyl 6-[2-(5-chloro-2-{[(3,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylate	Rt=4.31 [MH+] 502.4, 504.4
	Ethyl 6-[2-(5-chloro-2-{[(2-chloro-6-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylate	Rt=4.18 [MH+] 500.4
	Ethyl 6-[2-(5-chloro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylate	Rt=4.10 [MH+] 502.4, 504.4
	Ethyl 6-[2-(5-chloro-2-{[(2,6-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylate	Rt=4.15 [MH+] 484.4, 486.4
	Ethyl 6-[2-(5-chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylate	Rt=4.35 [MH+] 500.4
	Ethyl 6-[2-(5-chloro-2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylate	Rt=4.33 [MH+] 482.4
	Ethyl 6-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-pyridinecarboxylate	Rt=4.27, [MH+] 470.3, 472.3

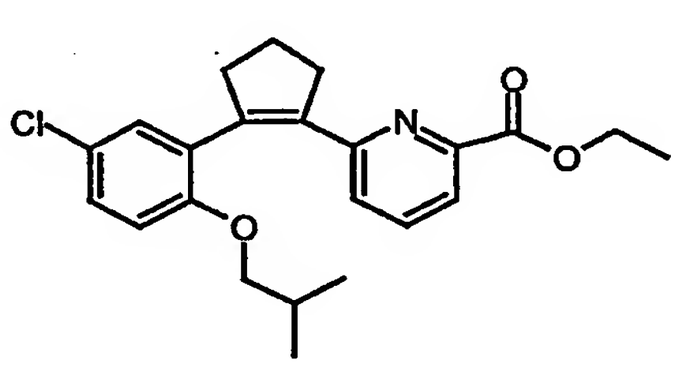
	Ethyl 2-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-pyridinecarboxylate	Rt=3.94, [MH+] 470.3, 472.3
	Ethyl 6-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt=4.20 [MH+] 470.3, 472.3

Ethyl 6-(2-{5-chloro-2-[(cyclopentylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylate



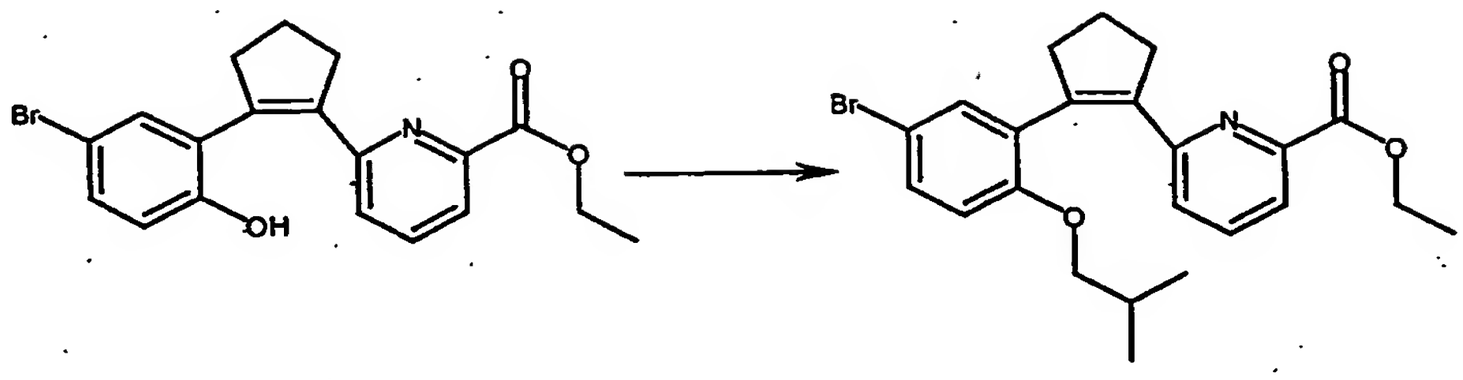
A mixture of 6-[2-(5-chloro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid (100mg, 0.29mmol), potassium carbonate (200mg, 1.45mmol) and cyclopentylmethyl 4-methylbenzenesulfonate (90mg, 0.35mmol) in DMF (3ml) was heated at 90°C under nitrogen for 2 hours. More cyclopentylmethyl 4-methylbenzenesulfonate (40mg, 0.16mmol) was added and the mixture heated for another 2 hours. After cooling the solution was diluted with water and extracted with ethyl acetate (3x10ml). The combined extracts were dried ($MgSO_4$) and evaporated. Purification was carried out by flash chromatography (10% ethyl acetate:iso-hexane) to yield the title compound as a clear oil.
LC/MS: Rt = 4.68, [MH+] 426, 428

Ethyl 6-(2-{5-chloro-2-[(2-methylpropyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylate



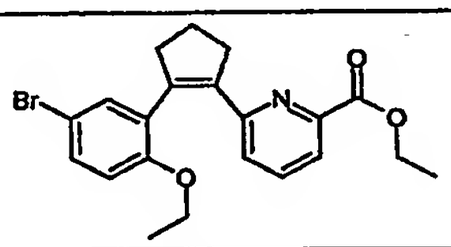
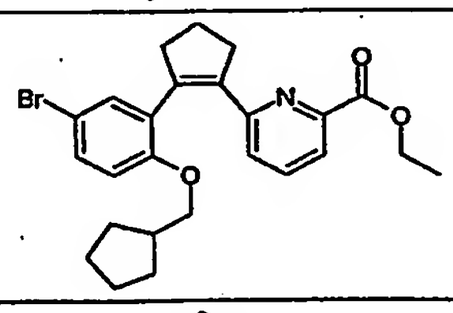
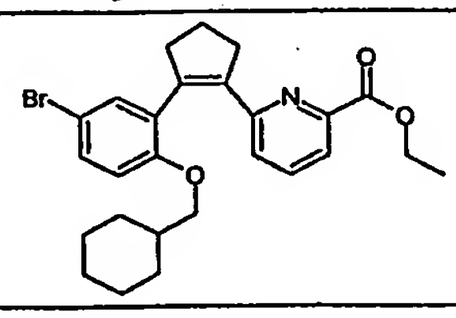
Prepared in a similar manner to ethyl 6-(2-{5-chloro-2-[(cyclopentylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylate using 1-bromo-2-methylpropane instead of cyclopentylmethyl 4-methylbenzenesulfonate. LC/MS: Rt=4.49 [MH+] 400, 402

Ethyl 6-(2-{5-bromo-2-[(1-methylethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylate

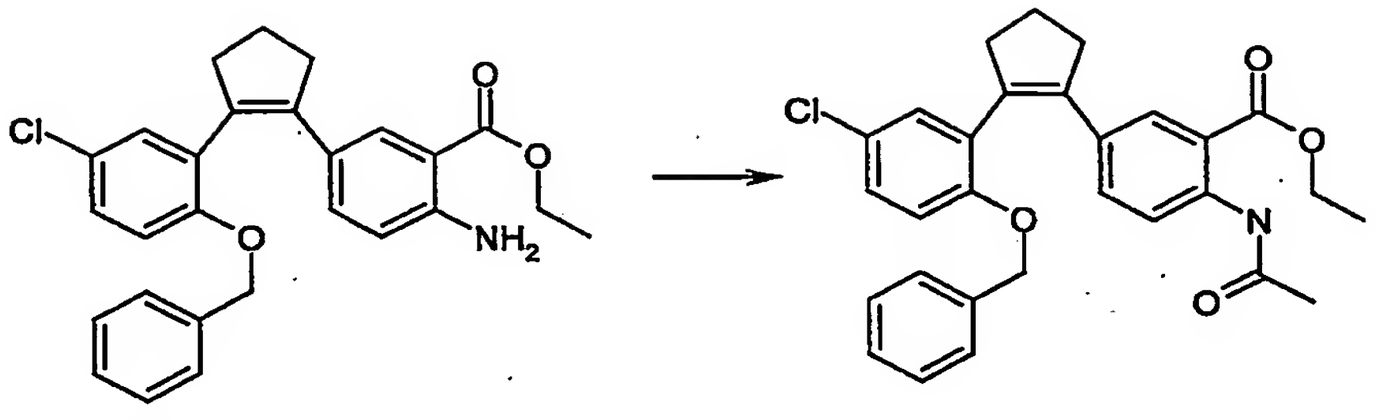


A solution of ethyl 6-[2-(5-bromo-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate (125mg, 0.32mmol) in dry THF (2ml) was treated with diethyl azodicarboxylate (65mg, 67µl, 0.35mmol), triphenylphosphine (84mg, 0.35 mmol) and iso-butyl alcohol (22mg, 27µl, 0.3mmol). The reaction mixture was stirred at room temperature overnight. The solvent was evaporated and the residue chromatographed using hexane/ethyl acetate 95:5 to give the title compound as a colourless oil.
LCMS: Rt = 4.32 min. [M+H] = 444, 446.

The following intermediates were prepared by a similar route to Ethyl 6-(2-{5-bromo-2-[(1-methylethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylate from the appropriate intermediates.

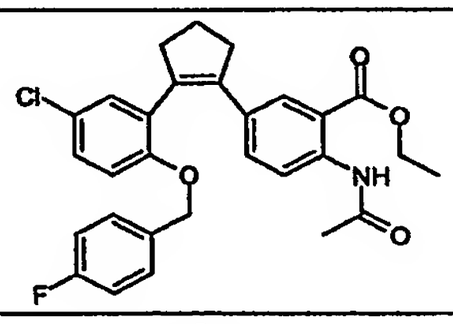
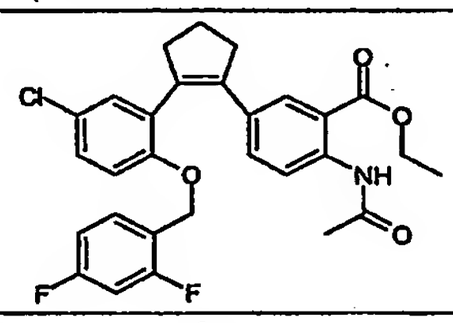
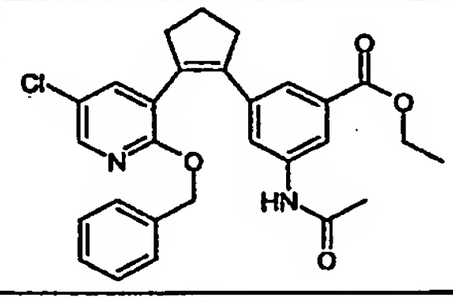
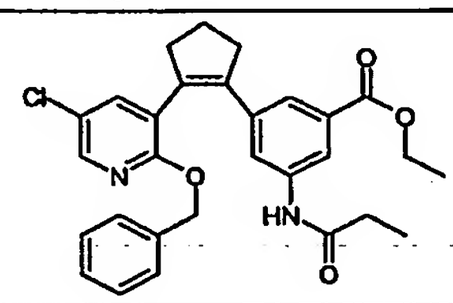
Structure	Name	LC/MS
	Ethyl 6-{2-[5-bromo-2-(ethyloxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 3.96 min. [M+H] = 416, 418
	Ethyl 6-(2-{5-bromo-2-[(cyclopentylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylate	Rt = 4.52 min. [M+H] = 470, 472
	Ethyl 6-(2-{5-bromo-2-[(cyclohexylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylate	Rt = 4..64min [M+H] = 484, 486

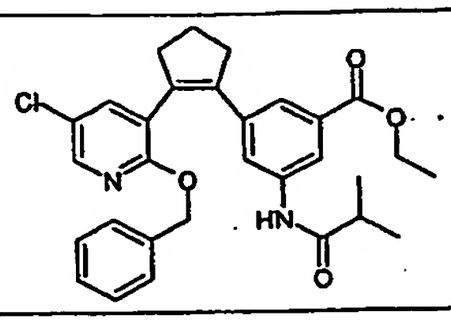
Ethyl 2-(acetylamino)-5-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)benzoate



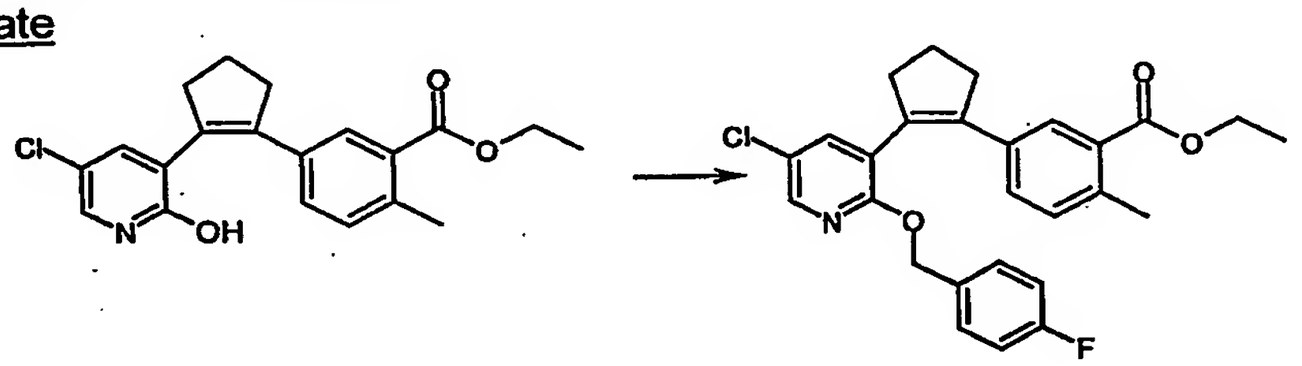
A mixture of ethyl 2-amino-5-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)benzoate (75mg, 0.17mmol), acetyl chloride (21mg, 0.3mmol), and triethylamine (30g, 42µl, 0.3mmol) in dichloromethane (3 ml) was stirred at room temperature for 30 mins. The solvent was evaporated and the residue was chromatographed eluting with ethyl acetate/hexane 1:4 to give the title compound as as colourless glass.
Rt = 4.08 min. [M+H] = 490

The following intermediates were prepared by a similar route to ethyl 2-(acetylamino)-5-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)benzoate from the appropriate intermediates.

Structure	Name	LC/MS
	Ethyl 2-(acetylamino)-5-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]benzoate	Rt = 4.09 min. [M+H] = 508
	Ethyl 2-(acetylamino)-5-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]benzoate	Rt = 4.11 min. [M+H] = 526
	Ethyl 3-(acetylamino)-5-(2-{5-chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)benzoate	Rt = 4.04 min [M+H] = 491
	Ethyl 3-(2-{5-chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-5-(propanoylamino)benzoate	Rt = 4.03 min. [M+H] = 505

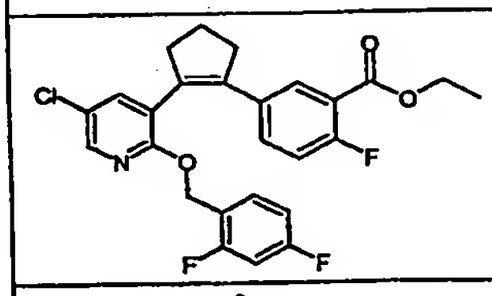
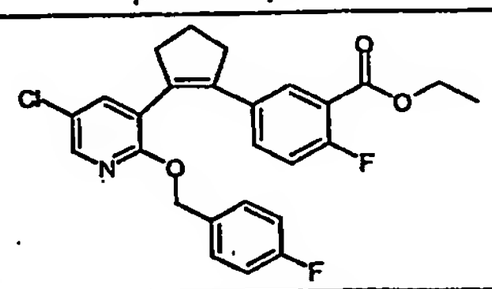
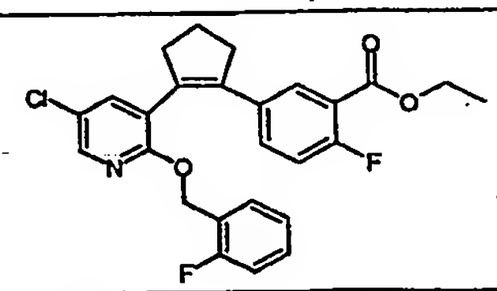
	Ethyl 3-(2-{5-chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-5-[(2-methylpropanoyl)amino]benzoate	Rt = 4.25 min. [M+H} = 519

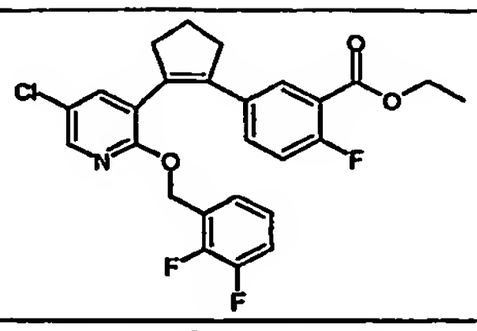
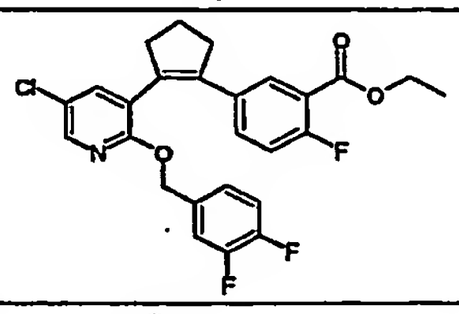
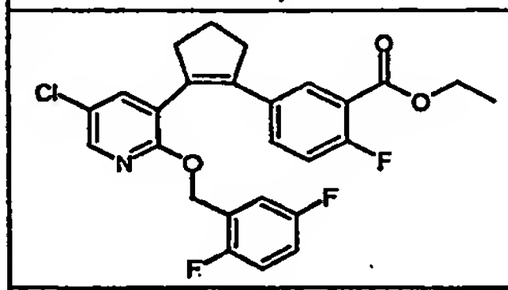
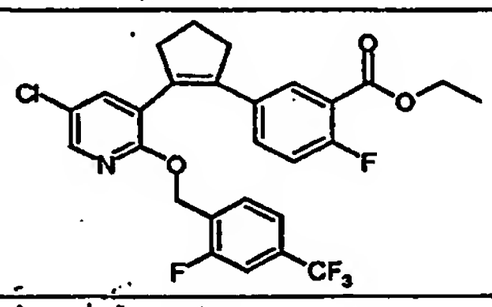
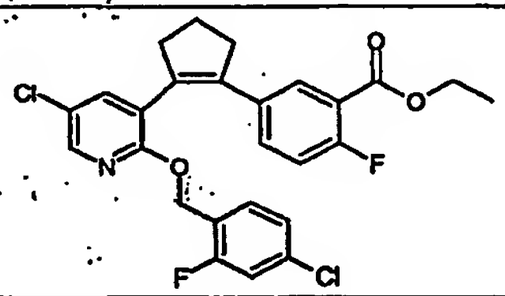
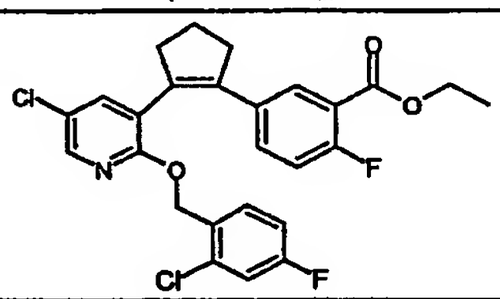
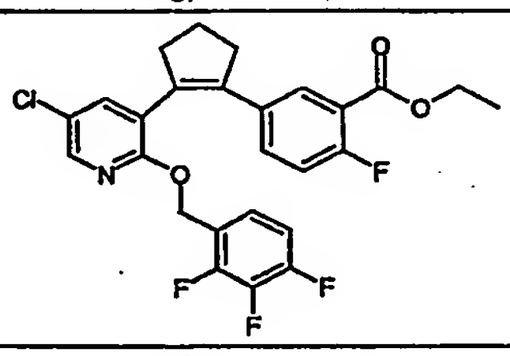
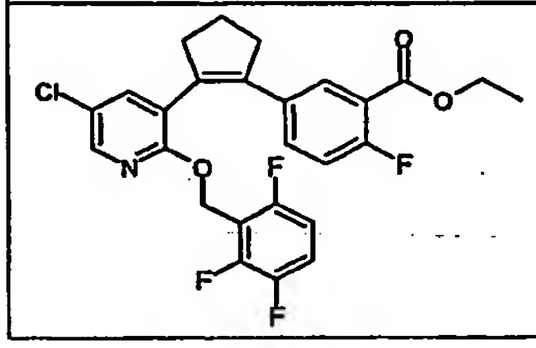
Ethyl 5-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-methylbenzoate

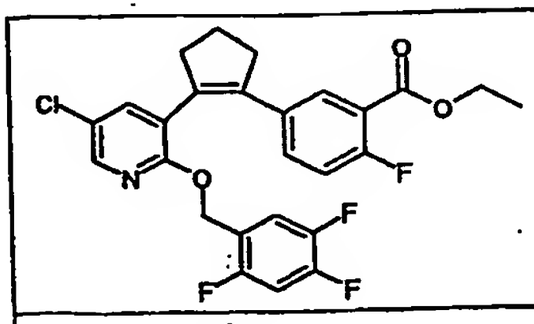
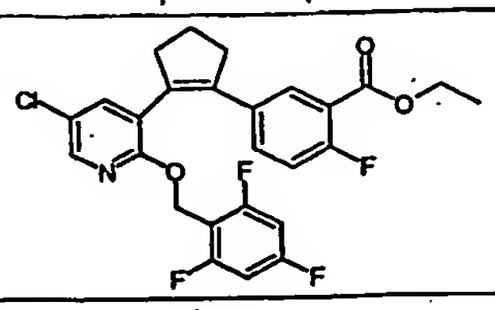
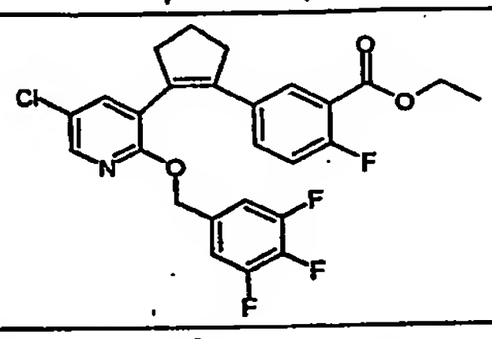
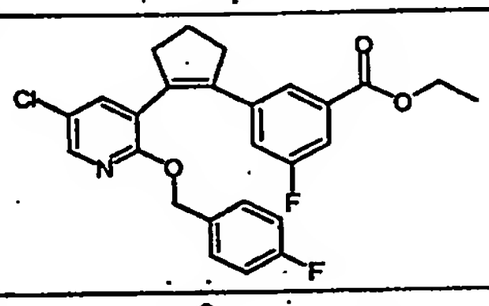
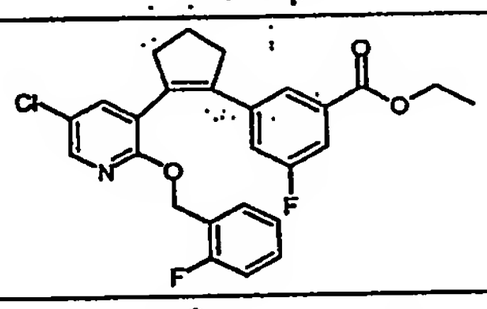
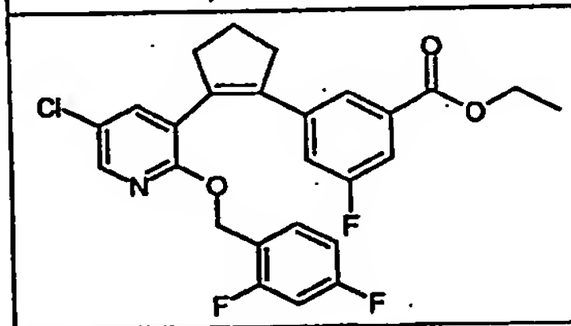
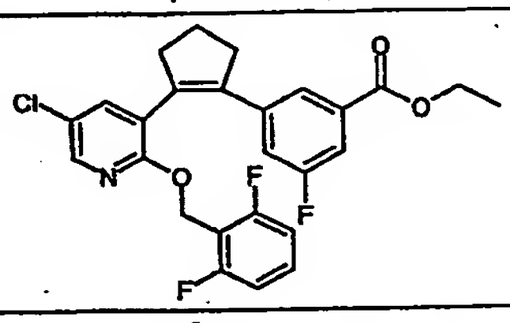
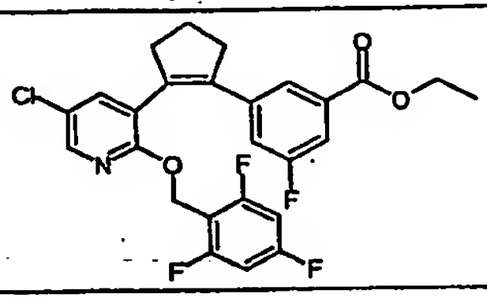


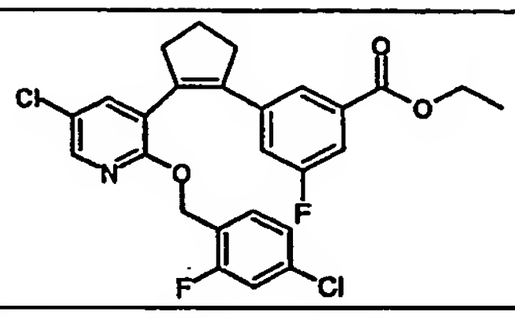
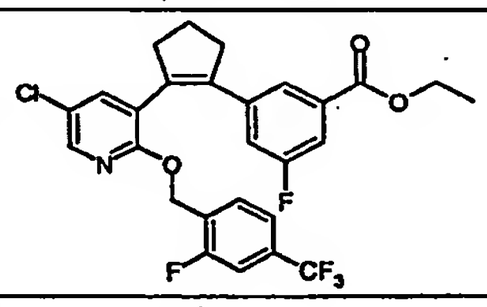
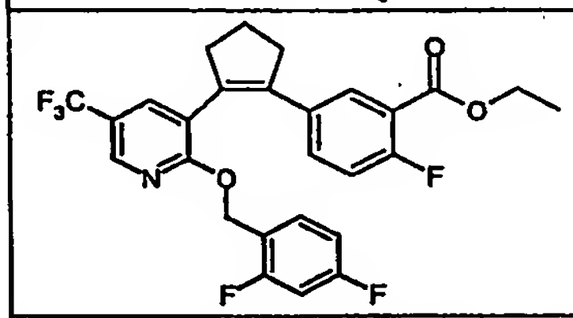
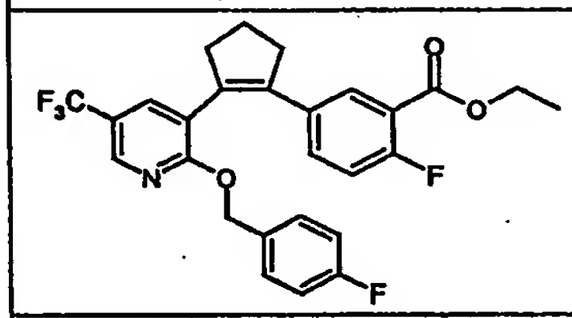
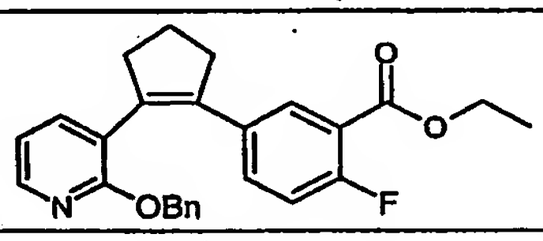
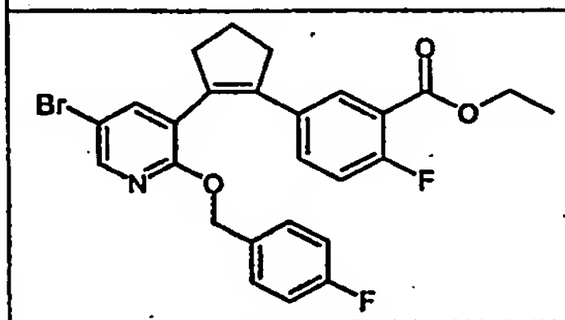
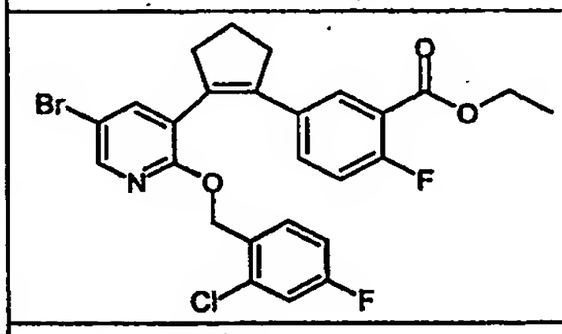
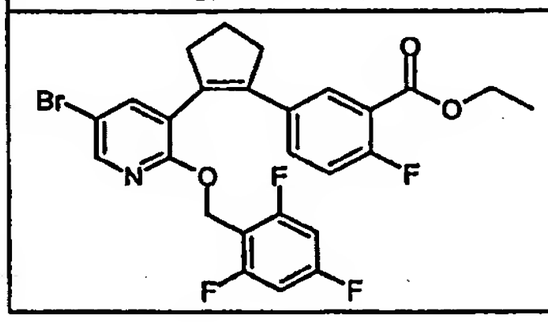
Ethyl 5-[2-(5-chloro-2-oxo-1,2-dihydro-3-pyridinyl)-1-cyclopenten-1-yl]-2-methylbenzoate (76mg, 0.213mmol) was dissolved in toluene (3ml) and silver carbonate (65mg, 0.234mmol) and 4-fluorobenzyl bromide (29□l, 0.234mmol) added. The mixture was heated to reflux for 1 hour then stirred at room temperature for 16 hours. After filtration, the solution was washed with water, dried ($MgSO_4$) and evaporated. The residue was flash chromatographed eluting with 2% ethyl acetate/isohexane to give the title compound (47mg). LC/MS Rt=4.47min $[MH^+]$ 466, 468.

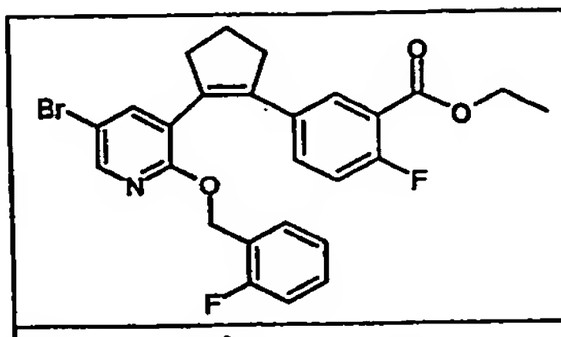
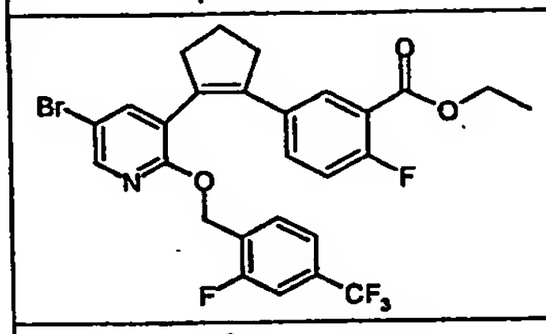
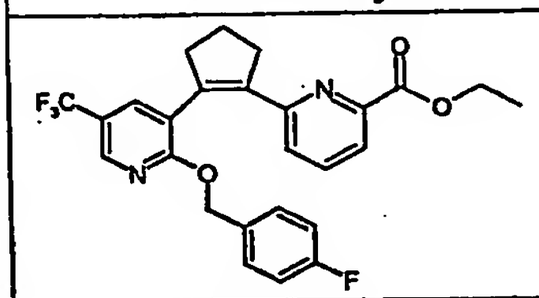
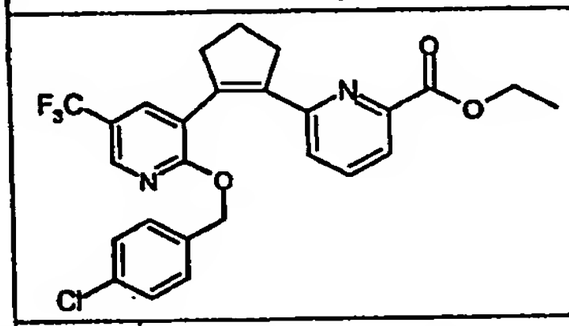
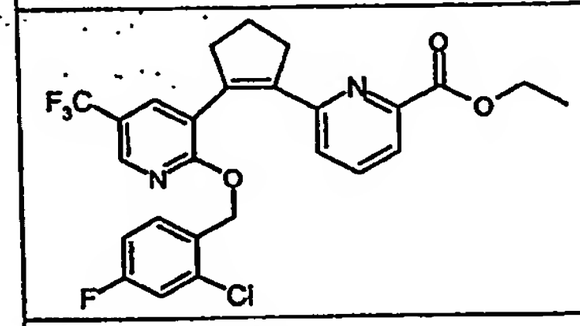
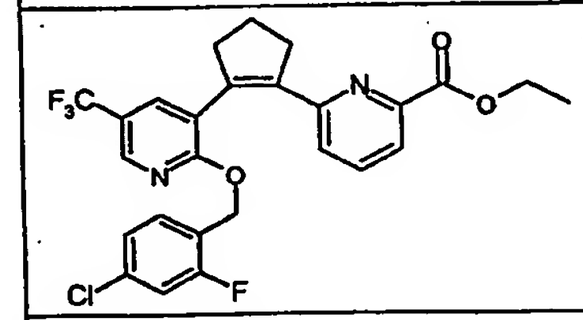
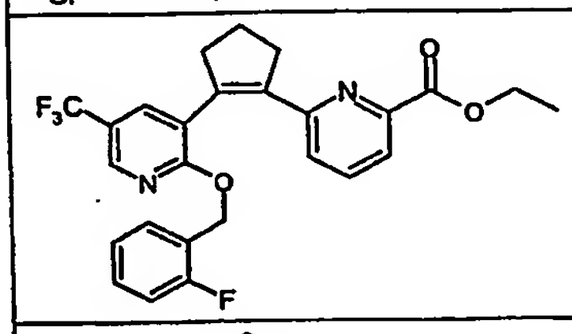
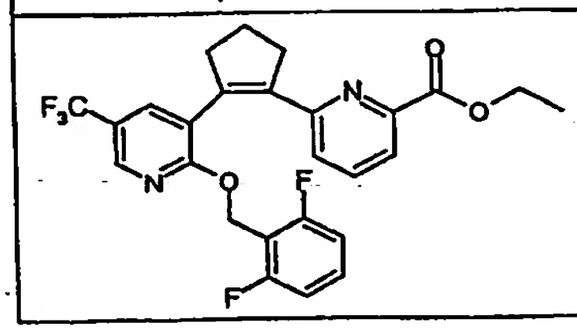
The following intermediates were prepared by a similar route to ethyl 5-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-methylbenzoate from the appropriate intermediates.

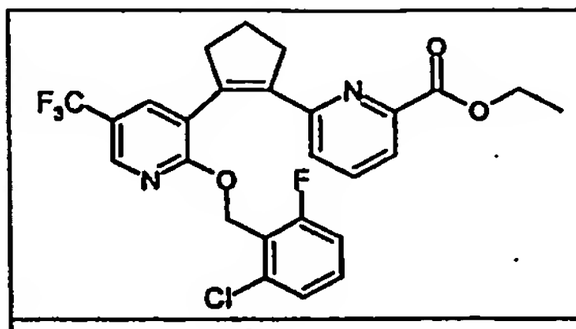
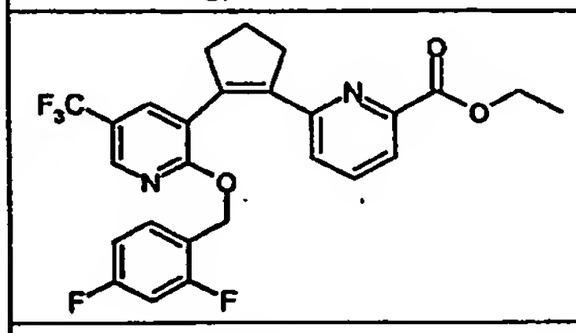
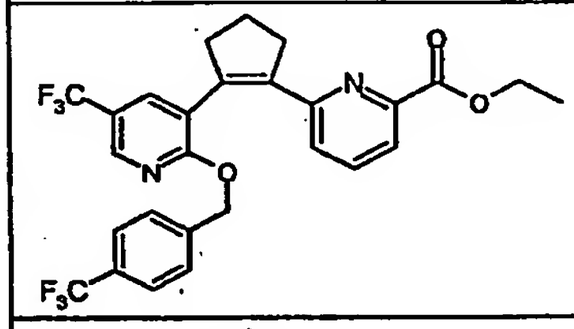
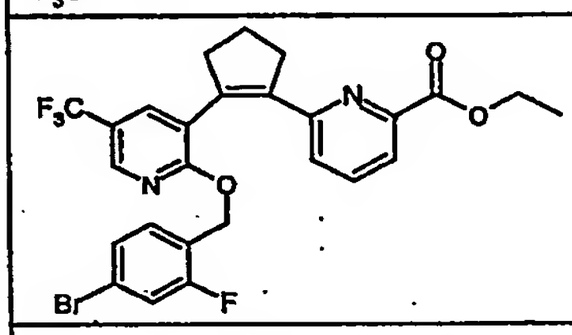
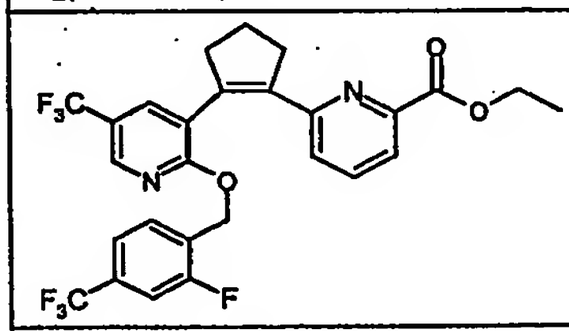
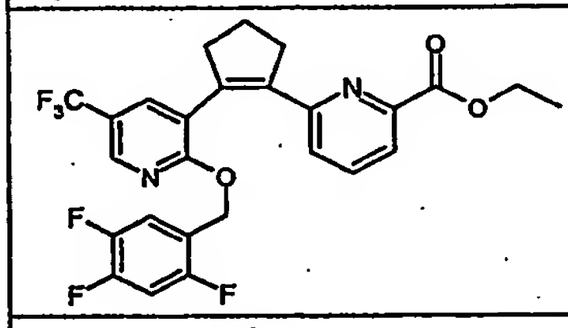
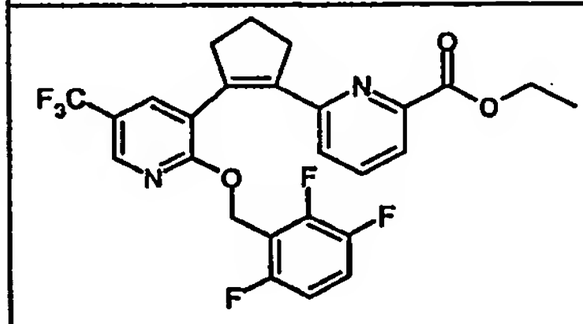
	COMPOUND NAME	LC/MS
	Ethyl 5-[2-(5-chloro-2-{[(2,4-difluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.46min. $[MH^+]$ 488, 490.
	Ethyl 5-[2-(5-chloro-2-{[(4-fluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.42min. $[MH^+]$ 470, 472.
	Ethyl 5-[2-(5-chloro-2-{[(2-fluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.50min. $[MH^+]$ 470, 472.

	Ethyl 5-[2-(5-chloro-2-{[(2,3-difluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.40min. [MH^+] 488, 490.
	Ethyl 5-[2-(5-chloro-2-{[(3,4-difluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.44min. [MH^+] 488, 490.
	Ethyl 5-[2-(5-chloro-2-{[(2,5-difluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.43min. [MH^+] 488, 490.
	ethyl 5-{2-[5-chloro-2-({[2-fluoro-4-(trifluoromethyl)phenyl] methyl}oxy)-3-pyridinyl]-1-cyclopenten-1-yl}-2-fluorobenzoate	Rt = 4.32min. [MH^+] 538, 540.
	Ethyl 5-[2-(5-chloro-2-{[(4-chloro-2-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.32min. [MH^+] 504, 506.
	Ethyl 5-[2-(5-chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.50min. [MH^+] 504, 506.
	Ethyl 5-[2-(5-chloro-2-{[(2,3,4-trifluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.43min. [MH^+] 506, 508.
	Ethyl 5-[2-(5-chloro-2-{[(2,3,6-trifluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.55min. [MH^+] 506, 508.

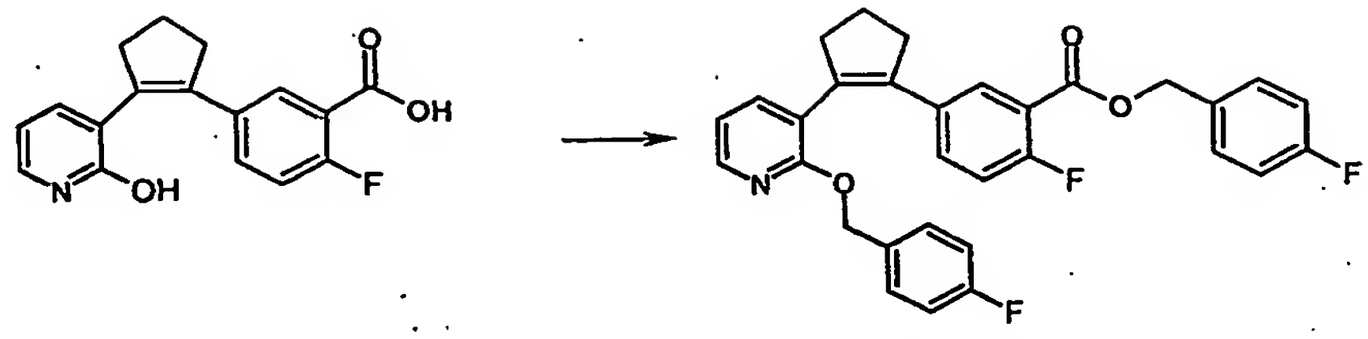
	Ethyl 5-[2-(5-chloro-2-{[(2,4,5-trifluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.62min. [MH^+] 506, 508.
	Ethyl 5-[2-(5-chloro-2-{[(2,4,6-trifluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.40min. [MH^+] 506, 508.
	Ethyl 5-[2-(5-chloro-2-{[(3,4,5-trifluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.49min. [MH^+] 506, 508.
	Ethyl 3-[2-(5-chloro-2-{[(4-fluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-5-fluorobenzoate	Rt = 4.36min. [MH^+] 470, 472.
	Ethyl 3-[2-(5-chloro-2-{[(2-fluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-5-fluorobenzoate	Rt = 4.38min. [MH^+] 470, 472.
	Ethyl 3-[2-(5-chloro-2-{[(2,4-difluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-5-fluorobenzoate	Rt = 4.50min. [MH^+] 488, 490.
	Ethyl 3-[2-(5-chloro-2-{[(2,6-difluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-5-fluorobenzoate	Rt = 4.50min. [MH^+] 488, 490.
	Ethyl 3-[2-(5-chloro-2-{[(2,4,6-trifluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-5-fluorobenzoate	Rt = 4.53min. [MH^+] 506, 508.

	Ethyl 3-[2-(5-chloro-2-{[(4-chloro-2-fluoro phenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-5-fluorobenzoate	Rt = 4.72min. [MH^+] 504, 506.
	Ethyl 3-{2-[5-chloro-2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)-3-pyridinyl]-1-cyclopenten-1-yl}-5-fluorobenzoate	Rt = 4.72min. [MH^+] 538, 540.
	Ethyl 5-{2-[2-{[(2,4-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-fluorobenzoate	Rt = 4.44min. [MH^+] 522.
	Ethyl 2-fluoro-5-{2-[2-{[(4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}benzoate	Rt = 4.41min. [MH^+] 504.
	Ethyl 2-fluoro-5-(2-{2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)benzoate	Rt = 4.14min. [MH^+] 418.
	Ethyl 5-[2-(5-bromo-2-{[(4-fluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.36min. [MH^+] 514, 516.
	Ethyl 5-[2-(5-bromo-2-{[(2-chloro-4-fluoro phenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.64min. [MH^+] 548, 550.
	Ethyl 5-[2-(5-bromo-2-{[(2,4,6-trifluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 4.44min. [MH^+] 550, 552.

	Ethyl 5-[2-(5-bromo-2-{[(2-fluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt = 3.86min. [MH$^+$] 514, 516.
	Ethyl 5-{2-[5-bromo-2-({[2-fluoro-4-(trifluoro methyl)phenyl]methyl}oxy)-3-pyridinyl]-1-cyclopenten-1-yl}-2-fluorobenzoate	Rt = 4.61min. [MH$^+$] 582, 584.
	Ethyl 6-(2-{2-[4-fluoro(phenylmethoxy)]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-pyridine-2-carboxylate	LC/MS Rt=4.11min [MH$^+$] 487.
	Ethyl 6-{2-[2-{[(4-chlorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt=4.24min [MH$^+$] 503
	Ethyl 6-{2-[2-{[(2-chloro-4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt=4.28min [MH$^+$] 521
	Ethyl 6-{2-[2-{[(4-chloro-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt=4.28min [MH$^+$] 521
	Ethyl 6-{2-[2-{[(2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt=4.11min [MH$^+$] 487
	Ethyl 6-{2-[2-{[(2,6-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt=4.08min [MH$^+$] 505

	Ethyl 6-{2-[2-{[(2-chloro-6-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt=4.20min [MH$^+$] 521
	Ethyl 6-{2-[2-{[(2,4-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt=4.13min [MH$^+$] 505
	Ethyl 6-{2-[5-(trifluoromethyl)-2-({[4-(trifluoromethyl)phenyl]methyl}oxy)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt=4.25min [MH$^+$] 537
	Ethyl 6-{2-[2-{[(4-bromo-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt=4.31min [MH$^+$] 565, 567
	Ethyl 6-{2-[2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt=4.29min [MH$^+$] 555
	Ethyl 6-[2-(5-(trifluoromethyl)-2-{[(2,4,5-trifluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt=4.17min [MH$^+$] 523
	Ethyl 6-[2-(5-(trifluoromethyl)-2-{[(2,3,6-trifluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt=4.10min [MH$^+$] 523

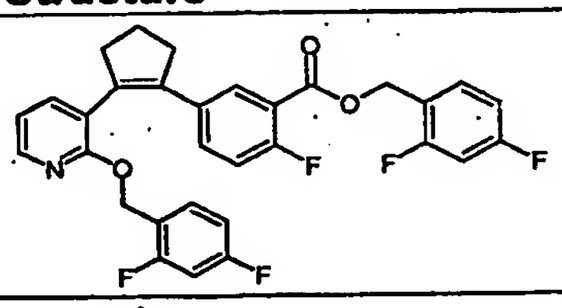
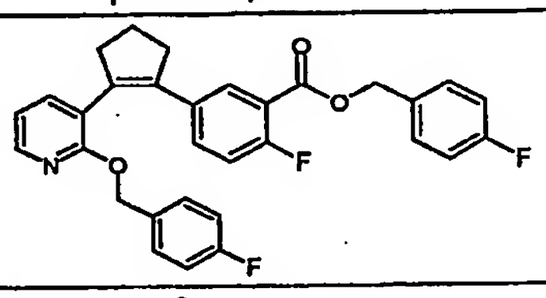
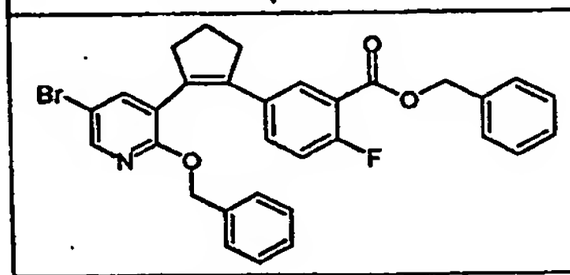
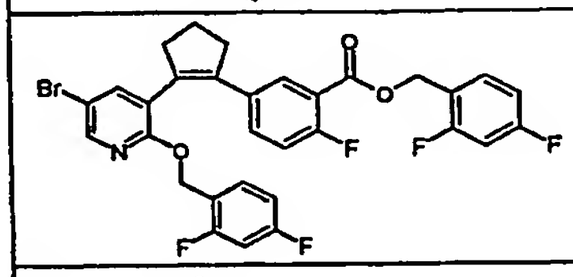
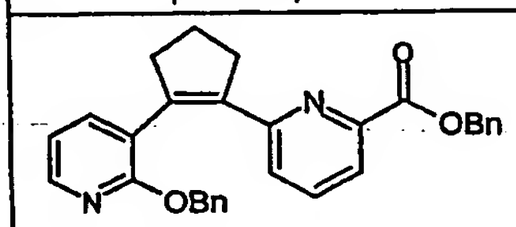
(4-Fluorophenyl)methyl 2-fluoro-5-[2-(2-{[(4-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]benzoate

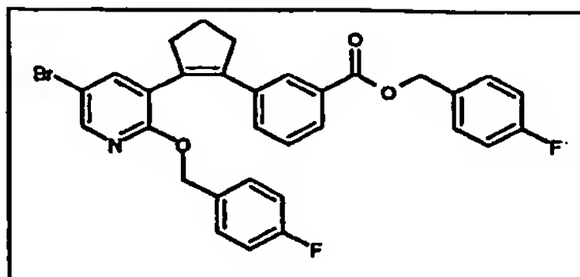
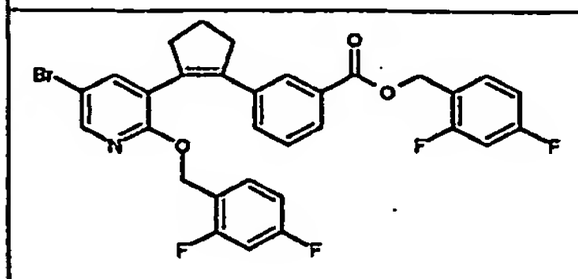


2-Fluoro-5-[2-(2-oxo-1,2-dihydro-3-pyridinyl)-1-cyclopenten-1-yl]benzoic acid (65mg, 0.217mmol) was dissolved in toluene (2ml) and silver carbonate (132mg, 0.478mmol) and 4-fluorobenzyl bromide (60µl, 0.478mmol) added. The mixture was heated to reflux for 16 hours. After filtration and dilution with ethyl acetate, the solution was washed with water, dried ($MgSO_4$) and evaporated. The residue was flash chromatographed eluting with 3% ethyl acetate/isohexane to give the title compound (32mg).

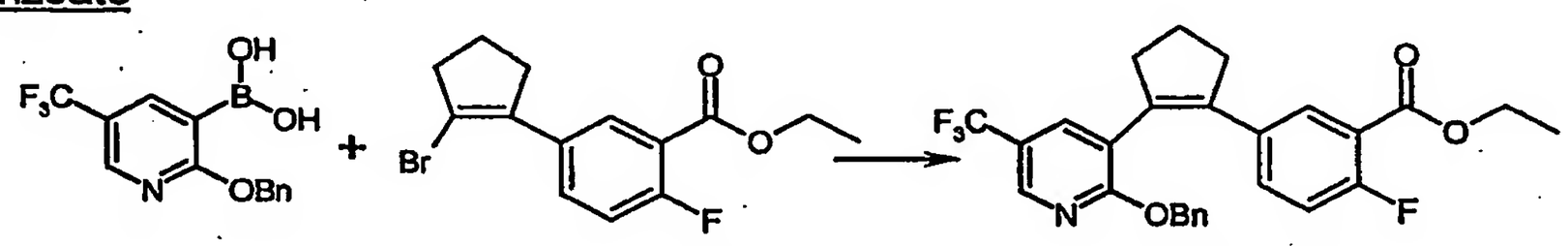
LC/MS Rt=4.40min $[MH^+]$ 516.

The following intermediates were prepared by a similar route to (4-fluorophenyl)methyl 2-fluoro-5-[2-(2-{[(4-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]benzoate from the appropriate intermediates.

Structure	COMPOUND NAME	LCMS
	(2,4-Difluorophenyl) methyl 5-[2-(2-{[(2,4-difluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt=4.64min $[MH^+]$ 552.
	(4-Fluorophenyl)methyl 2-fluoro-5-[2-(2-{[(4-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]benzoate	Rt=4.37min $[MH^+]$ 516.
	Phenylmethyl 5-(2-{5-bromo-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-2-fluorobenzoate	Rt=4.64min $[MH^+]$ 558, 560.
	(2,4-Difluorophenyl) methyl 5-[2-(5-bromo-2-{[(2,4-difluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	Rt=4.66min $[MH^+]$ 630, 632.
	Phenylmethyl 6-(2-{2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylate	Rt=4.04min $[MH^+]$ 463.

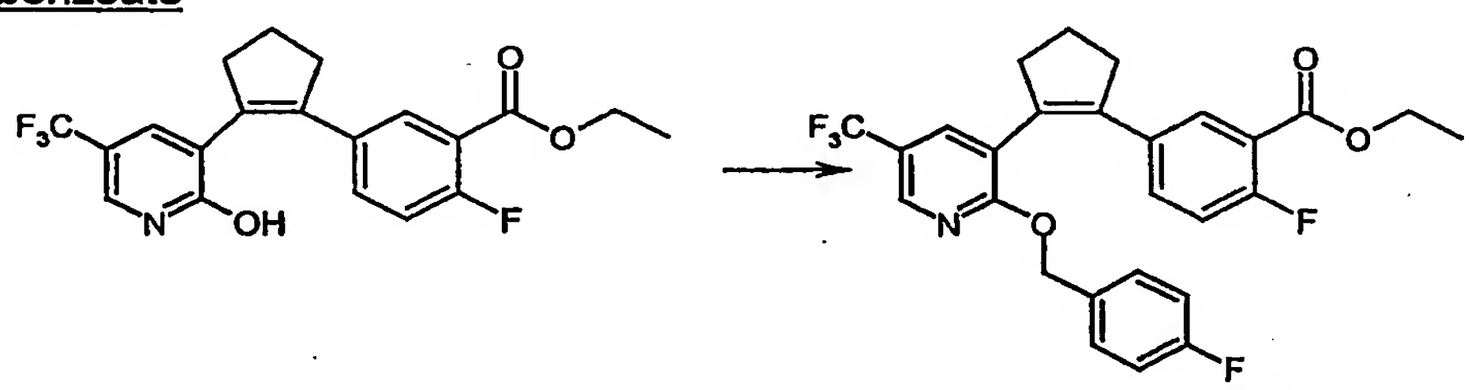
	(4-Fluorophenyl)methyl 3-[2-(5-bromo-2-{[(4-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]benzoate	Rt = 4.63min [MH^+] 576, 578
	(2,4-Difluorophenyl)methyl 3-[2-(5-bromo-2-{[(2,4-difluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]benzoate	Rt = 4.46min [MH^+] 612, 614

Ethyl 2-fluoro-5-{2-[2-(phenylmethoxy)-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate



2-(Phenylmethoxy)-5-(trifluoromethyl)pyridine-3-boronic acid (10.32g, 34.7mmol) and ethyl 5-(2-bromocyclopent-1-enyl)-2-fluorobenzoate (5.44g, 17.4mmol) were dissolved in dimethoxyethane (120mL) under nitrogen, and $Pd(PPh_3)_4$ (1.00g, 0.87mmol) and 2N aqueous sodium carbonate solution (60ml) were added. The mixture was heated at 80°C for 18hours, but TLC analysis showed incomplete reaction. Further $Pd(PPh_3)_4$ was added and heating was continued for 3 hours. After cooling, the solvents were removed *in vacuo*, and the residue was partitioned between diethyl ether and water. The aqueous was extracted with further ether, and the combined organic extracts were dried (Na_2SO_4) and concentrated *in vacuo*. The resulting dark brown oil was purified by flash chromatography on silica (gradient elution, 0-6% ethyl acetate/cyclohexane) to give the title compound (7.02g). LC/MS Rt=4.23min [MH^+] 485.

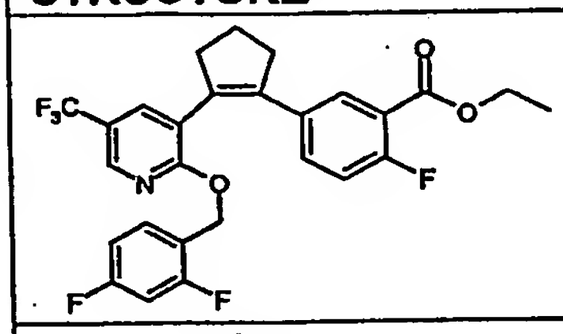
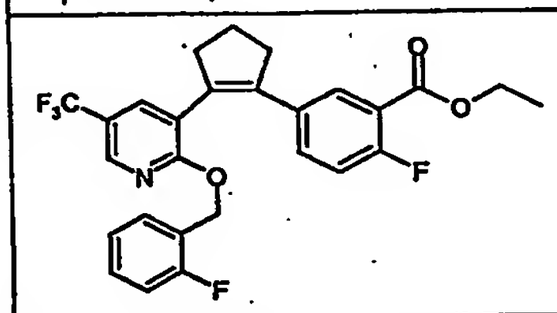
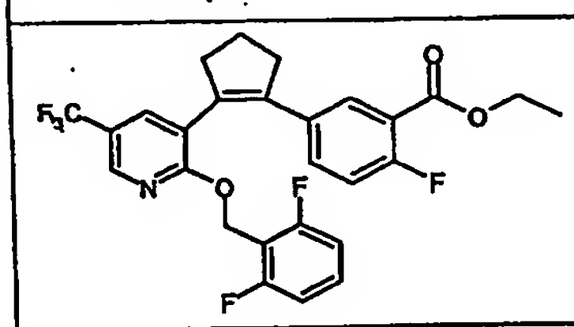
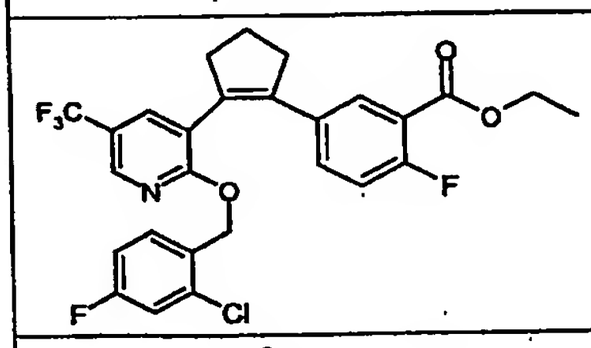
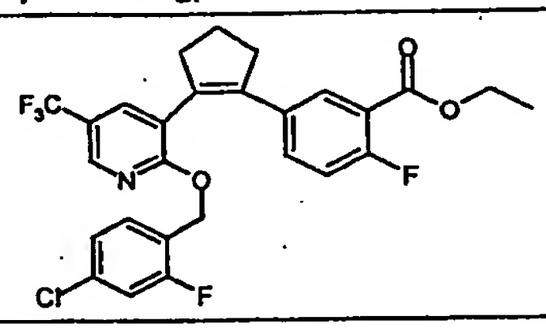
Ethyl 2-fluoro-5-(2-{2-[(4-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-benzoate



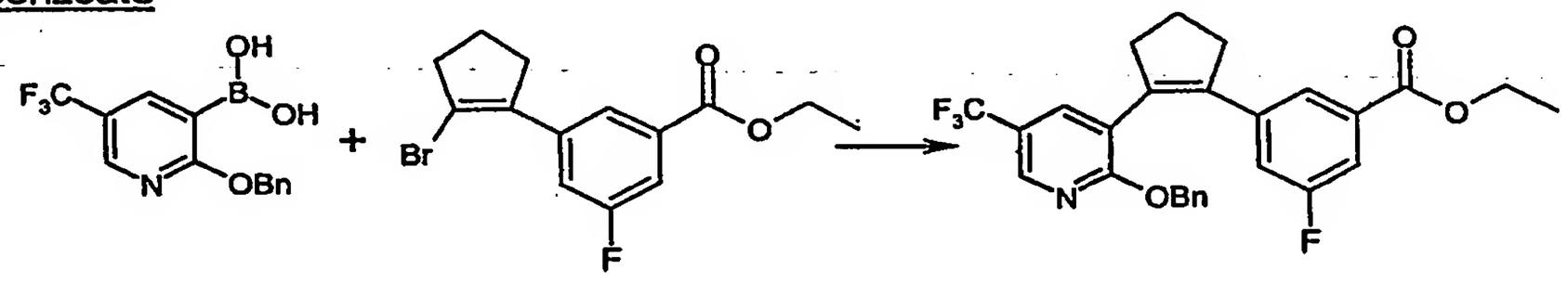
Ethyl 2-fluoro-5-{2-[2-hydroxy-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate (250mg, 0.633mmol) was dissolved in toluene (4ml), and silver carbonate (210mg, 0.764mmol) and 4-fluorobenzyl bromide (130mg, 1.45mmol) added. The mixture was heated to reflux for 5.5 hours. The mixture was concentrated *in vacuo*, and the residue was partitioned between water and dichloromethane. The organic extract was

concentrated *in vacuo*. The residue was purified by flash chromatography on silica (gradient elution, 0-4% ethyl acetate/cyclohexane) to give the title compound.. LC/MS Rt=4.31min [MH^+] 504.

The following compounds (table) were prepared by the same method from ethyl 2-fluoro-5-{2-[2-hydroxy-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate by reaction with appropriately substituted benzyl bromides.

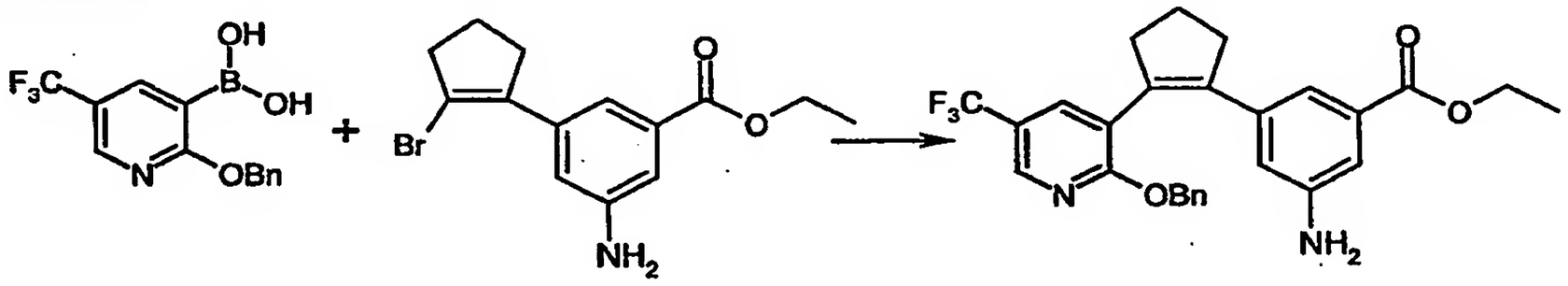
STRUCTURE	COMPOUND NAME	LCMS
	Ethyl 5-(2-{2-[(2,4-difluorophenyl) methoxy]-5-(trifluoromethyl) pyridin-3-yl}cyclopent-1-en-1-yl)-2-fluorobenzoate	Rt= 4.33min [MH^+] 522
	Ethyl 2-fluoro-5-(2-{2-[(2-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-benzoate	Rt= 4.32min [MH^+] 504
	Ethyl 5-(2-{2-[(2,6-difluorophenyl) methoxy]-5-(trifluoromethyl) pyridin-3-yl}cyclopent-1-en-1-yl)-2-fluorobenzoate	Rt= 4.30min [MH^+] 522
	Ethyl 5-(2-{2-[(2-chloro-4-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-2-fluorobenzoate	Rt= 4.45min [MH^+] 539
	Ethyl 5-(2-{2-[(4-chloro-2-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-2-fluorobenzoate	Rt= 4.45min [MH^+] 539

Ethyl 3-fluoro-5-{2-[2-(phenylmethoxy)-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate



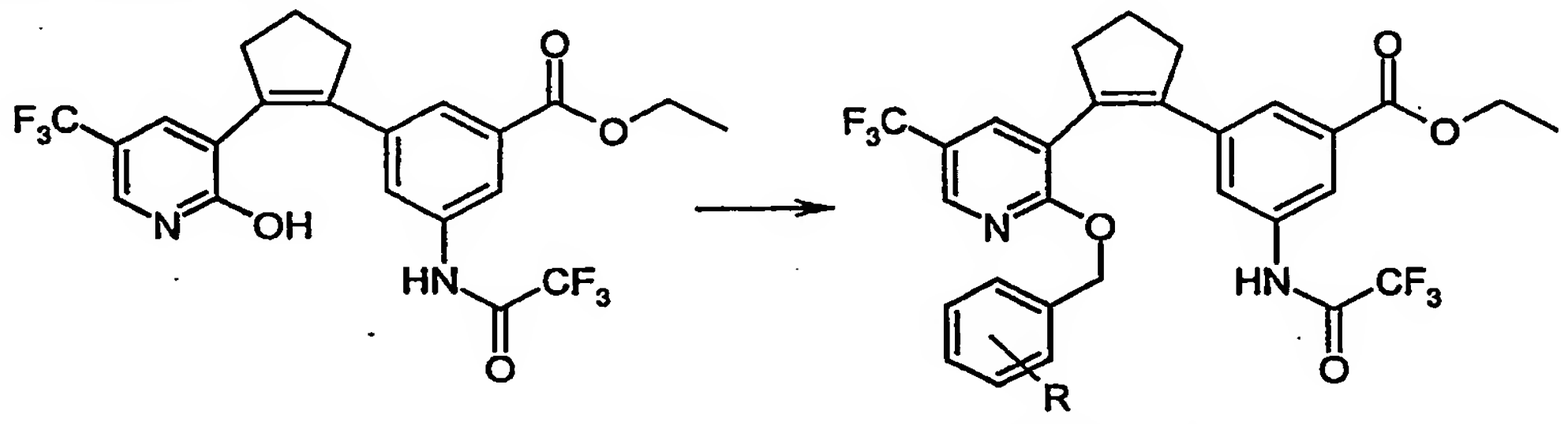
2-(Phenylmethoxy)-5-(trifluoromethyl)pyridine-3-boronic acid (10.53g, 33.6mmol) and ethyl 5-(2-bromocyclopent-1-enyl)-3-fluorobenzoate (5.93g, 20.0mmol) were dissolved in dimethoxyethane (120mL) under nitrogen, and $Pd(PPh_3)_4$ (1.15g, 1.0mmol) and 2N aqueous sodium carbonate solution (60ml) were added. The mixture was heated at 80°C for 18hours. After cooling, the solvents were removed *in vacuo*, and the residue was partitioned between diethyl ether and water. The aqueous was extracted with further ether, and the combined organic layers were dried (Na_2SO_4) and concentrated *in vacuo*. The resulting dark brown oil was purified by flash chromatography on silica (gradient elution, 0-4% ethyl acetate/cyclohexane) to give the title compound (7.42g). LC/MS Rt=4.32min [MH^+] 485.

Ethyl 3-amino-5-{2-[2-(phenylmethoxy)-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate



2-(Phenylmethoxy)-5-(trifluoromethyl)pyridine-3-boronic acid (6.0g, 20.2mmol) and ethyl 3-amino-5-(2-bromocyclopent-1-enyl)benzoate (3.16g, 10.1mmol) were dissolved in dimethoxyethane (50mL) under nitrogen, and $Pd(PPh_3)_4$ (0.58g, 0.5mmol) and 2N aqueous sodium carbonate solution (10ml) were added. The mixture was heated at 80°C for 18hours. After cooling, the solvents were removed in vacuo, and the residue was partitioned between diethyl ether and water. The aqueous was extracted with further ether (x2), and the combined organic layers were dried (Na_2SO_4) and concentrated in vacuo. The resulting dark brown oil was purified using an acidic solid phase cartridge (Isolute® Flash SCX-2, 50g), loading the crude material as a methanol solution and eluting with 10% aqueous ammonia in methanol. Concentration of the relevant fractions in vacuo gave the title compound (4.01g). LC/MS Rt=4.01min [MH^+] 483.

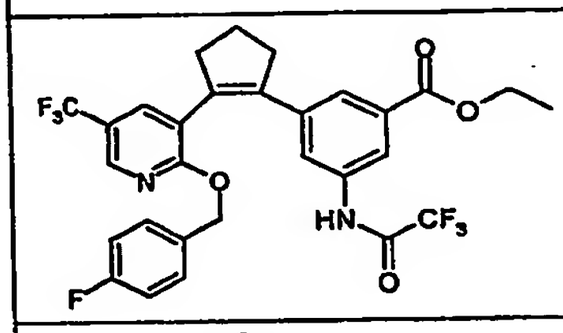
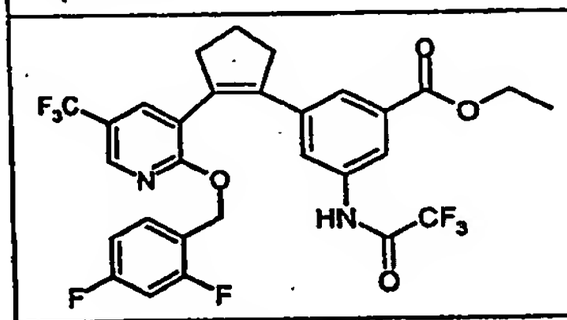
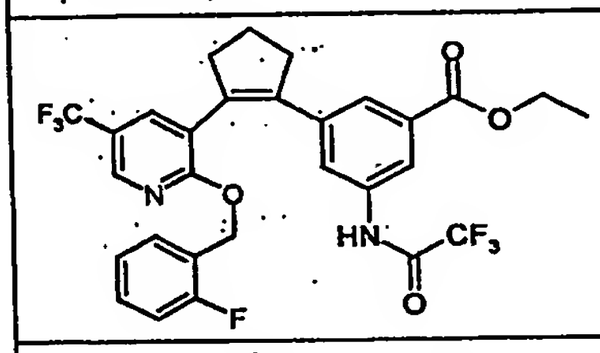
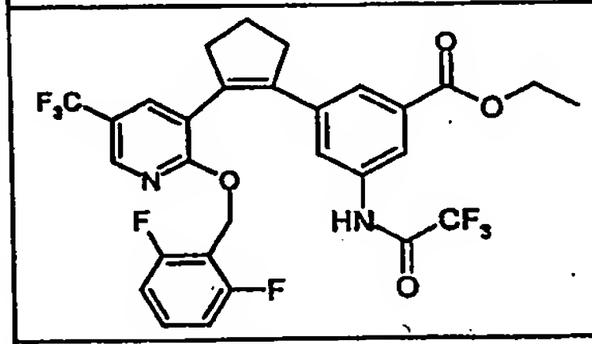
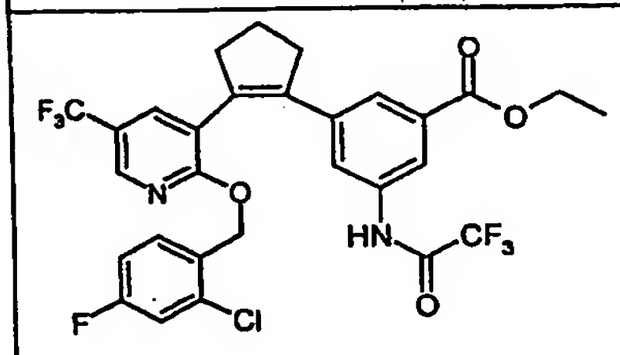
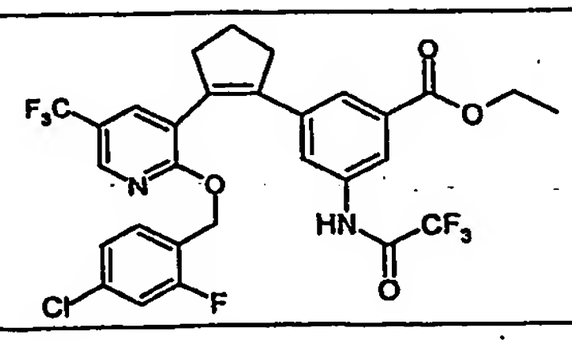
General Procedure

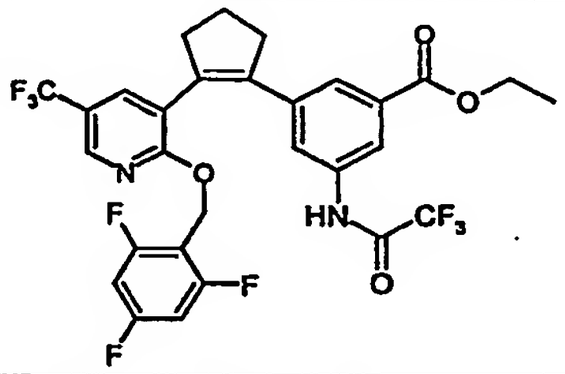
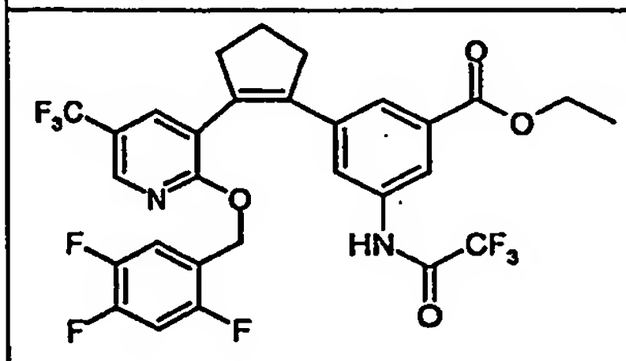
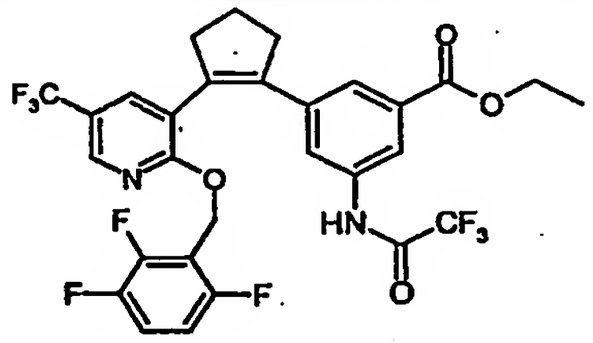
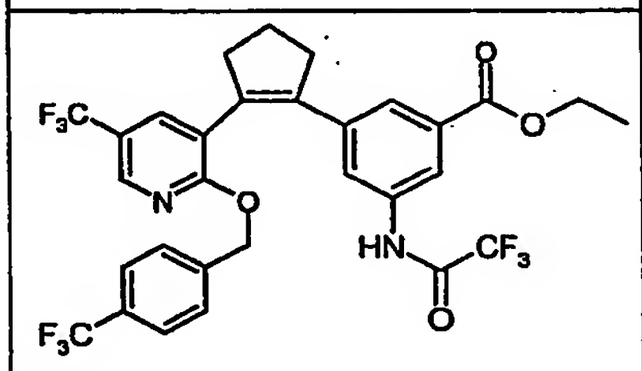
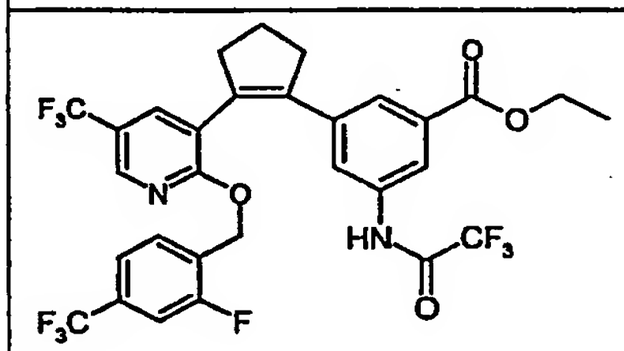
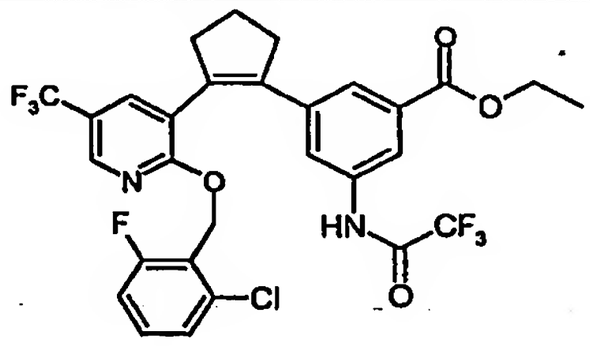


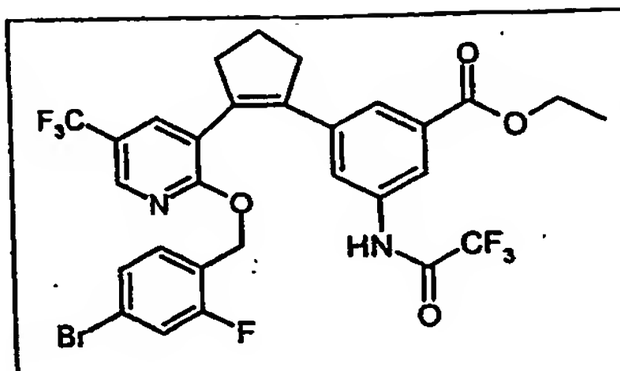
Ethyl 5-{2-[2-(hydroxy)-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}-3-(trifluoroacetamido)benzoate (122mg, 0.25mmol) was dissolved in toluene (4ml), together with silver carbonate (76mg, 0.275mmol) and a substituted benzyl bromide (1.1equiv.), and this was heated to reflux for 18 hours. The mixture was filtered and concentrated *in*

vacuo. The residue was purified by flash chromatography on silica (gradient elution, 0-10% ethyl acetate/cyclohexane).

The following compounds were prepared by the above General Procedure from ethyl 2-fluoro-5-{2-[2-hydroxy-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate by reaction with appropriately substituted benzyl bromides.

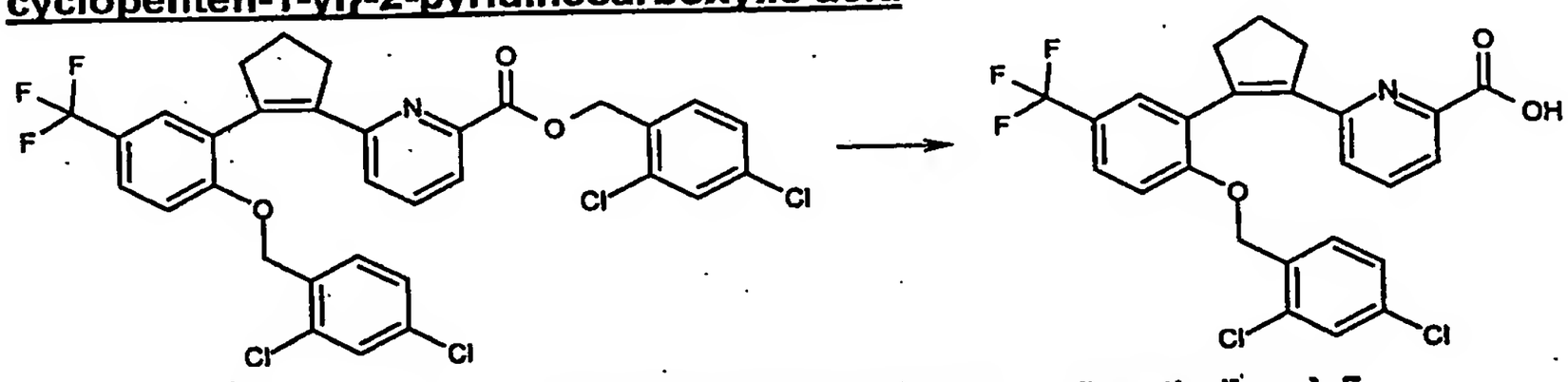
	COMPOUND NAME	LCMS
	Ethyl 5-(2-{2-[(4-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-3-(trifluoroacetamido)benzoate	Rt= 4.27min [MH$^+$] 597
	Ethyl 5-(2-{2-[(2,4-difluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-3-(trifluoroacetamido)benzoate	Rt= 4.29min [MH$^+$] 615
	Ethyl 5-(2-{2-[(2-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-3-(trifluoroacetamido)benzoate	Rt= 4.28min [MH$^+$] 597
	Ethyl 5-(2-{2-[(2,6-difluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-3-(trifluoroacetamido)benzoate	Rt= 4.25min [MH$^+$] 615
	Ethyl 5-(2-{2-[(2-chloro-4-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-3-(trifluoroacetamido)benzoate	Rt= 4.30min [MH$^+$] 631
	Ethyl 5-(2-{2-[(4-chloro-2-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-3-(trifluoroacetamido)benzoate	Rt= 4.29min [MH$^+$] 631

	Ethyl 3-(trifluoroacetamido)-5-(2-{5-(trifluoromethyl)-2-[(2,4,6-trifluorophenyl) methoxy]pyridin-3-yl}cyclopent-1-en-1-yl)-benzoate	Rt= 4.17min [MH^+] 633
	Ethyl 3-(trifluoroacetamido)-5-(2-{5-(trifluoromethyl)-2-[(2,4,5-trifluorophenyl) methoxy]pyridin-3-yl}cyclopent-1-en-1-yl)-benzoate	Rt= 4.30min [MH^+] 633
	Ethyl 3-(trifluoroacetamido)-5-(2-{5-(trifluoromethyl)-2-[(2,3,6-trifluorophenyl) methoxy]pyridin-3-yl}cyclopent-1-en-1-yl)-benzoate	Rt= 4.26min [MH^+] 633
	Ethyl 3-(trifluoroacetamido)-5-[2-(5-[trifluoromethyl]-2-{[4-(trifluoromethyl)phenyl] methoxy}pyridin-3-yl)cyclopent-1-en-1-yl]- benzoate	Rt= 4.37min [MH^+] 647
	Ethyl 5-[2-(2-{[2-fluoro-4-(trifluoromethyl)phenyl]methoxy}-5-[trifluoromethyl]pyridin-3-yl)cyclopent-1-en-1-yl]-3-(trifluoroacetamido)benzoate	Rt= 4.40min [MH^+] 665
	Ethyl 5-(2-{2-[(2-chloro-6-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-3-(trifluoroacetamido)benzoate	Rt= 4.32min [MH^+] 631

	Ethyl 5-(2-{2-[(4-bromo-2-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-3-(trifluoroacetamido)benzoate	Rt= 4.39min $[MH^+]$ 675, 677

PREPARATION OF EXAMPLES

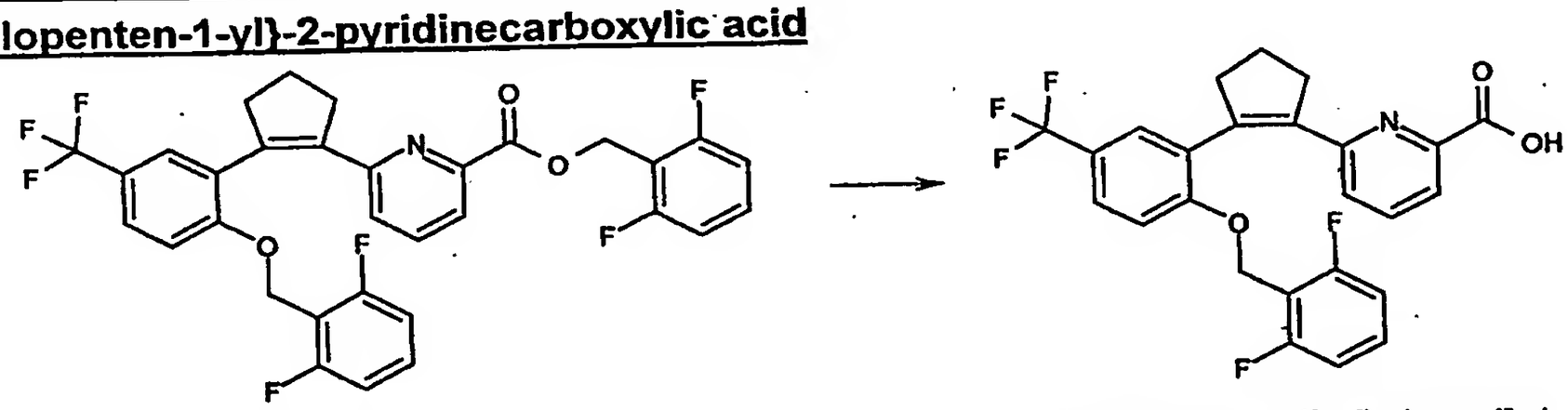
Example 1 6-{2-[2-{[(2,4-Dichlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid



(2,4-Dichlorophenyl)methyl 6-{2-[2-{[(2,4-dichlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate (0.095g), ethanol (2ml) and 2M sodium hydroxide solution were heated in a Smithcreator® microwave to 120°C for 3 minutes. After cooling the reaction was diluted with ethyl acetate and washed with dilute citric acid and brine, dried over $MgSO_4$, filtered and concentrated in vacuo to yield a yellow oil which was freeze-dried from acetonitrile/H_2O to give the title compound as an off-white solid.

^{1}H-NMR ($CDCl_3$) δ: 2.12-2.21 (2H, m), 2.91-2.98 (2H, m), 3.02-3.10 (2H, m), 5.03 (2H, s), 7.04 (1H, d), 7.08-7.16 (2H, m), 7.29 (1H, d), 7.35 (1H, d), 7.41 (1H, d), 7.58 (1H, dd), 7.72 (1H, t), 7.90 (1H, d). LC/MS Rt = 4.50 min, $[MH^+]$ 508, 510, 512.

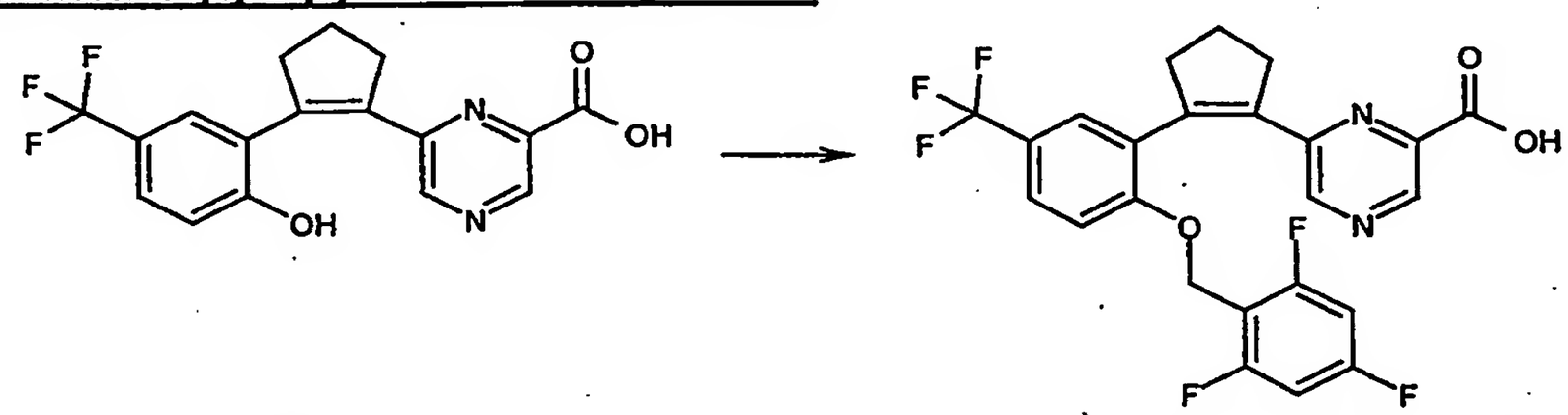
Example 2 6-{2-[2-{[(2,6-Difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid



Procedure as for 6-{2-[2-{[(2,4-dichlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid.

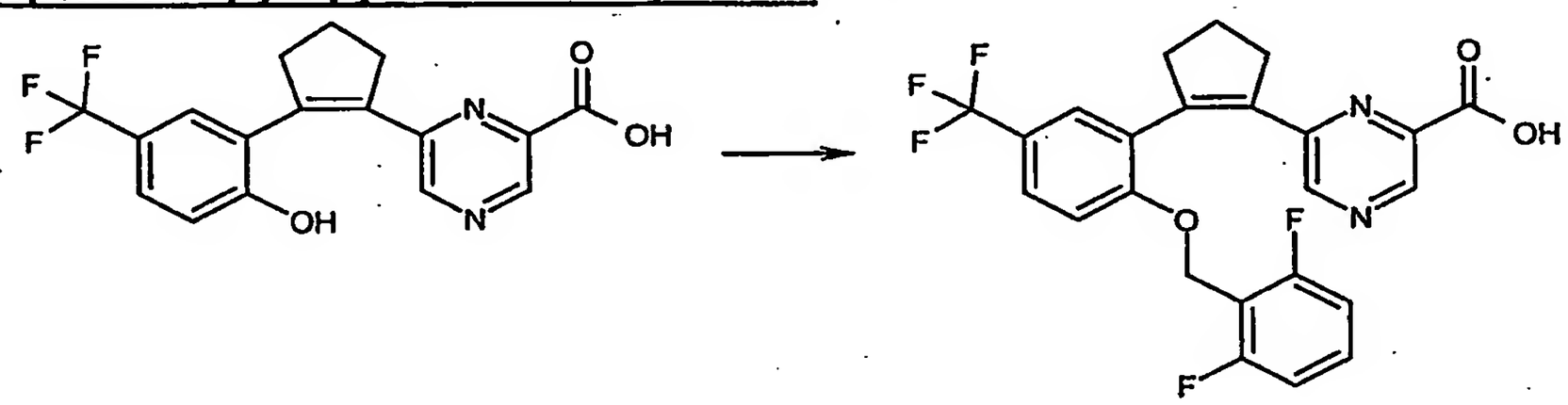
LC/MS t = 3.83, $[MH^+]$ 476.

Example 3 6-[2-(5-(Trifluoromethyl)-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid



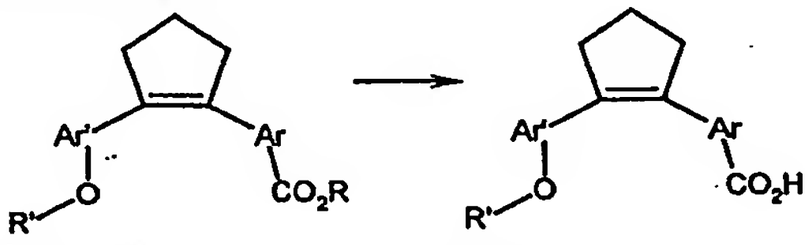
6-{2-[2-Hydroxy-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid (0.15g, 0.43mmol), 2,4,6-trifluorobenzyl bromide (0.192g, 0.86mmol), potassium carbonate (0.13g, 0.94mmol) and potassium iodide (0.014g, 0.086mmol) were refluxed in methanol (10ml) for 1 hour. The solvent was then removed in vacuo, the residue taken up in ethyl acetate and washed with acidifed water (pH3). The aqueous layer was washed with ethyl acetate (x2). The combined organic layers were washed with brine, dried over $MgSO_4$, filtered and concentrated in vacuo to yield a yellow oil. This was purified by preparative HPLC to yield the title compound as an off-white solid (0.075g).
^{1}H-NMR (MeOD) δ: 2.02-2.11 (2H, m), 2.85-2.93 (2H, m), 3.01-3.09 (2H, m), 5.04 (2H, s), 6.82 (2H, t), 7.35 (1H, d), 7.44 (1H, s), 7.64 (1H, d), 8.10 (1H, s), 8.86 (1H, s).
LC/MS Rt = 3.90 min, [MH^+] 495.

Example 4 6-{2-[2-{[(2,6-Difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid



Procedure as for 6-[2-(5-(trifluoromethyl)-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid. LC/MS Rt = 3.92 min, [MH^+] 477.

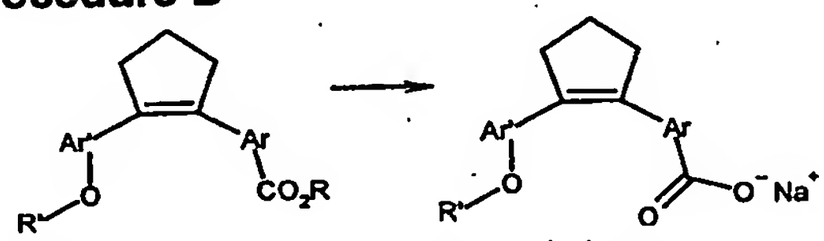
Standard Hydrolysis Procedure A



The ester (0.5mmol) was dissolved in methanol or ethanol (2ml) and 2M sodium hydroxide (1ml) added. The mixture was either stirred at from room temperature to reflux for from 30minutes to 20 hours until the reaction was complete by tlc or heated at 120°C in a Smithcreator® microwave for 3 minutes. The solution was diluted with water then extracted with isohexane or diethyl ether and acidified to pH4 with either hydrochloric acid,

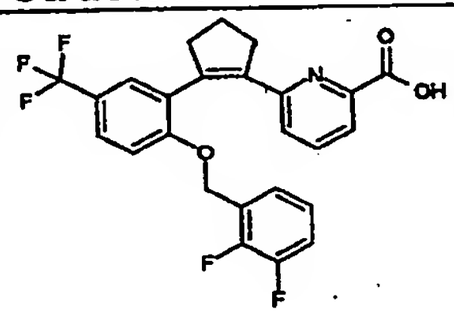
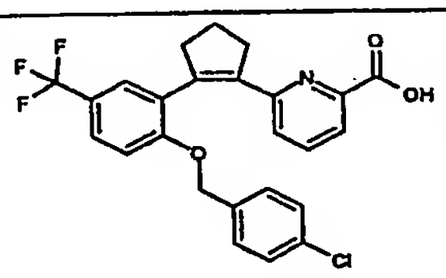
citric acid or acetic acid. The mixture was extracted with diethyl ether or dichloromethane. The organic solution was dried over magnesium sulphate and evaporated to give the title compound.

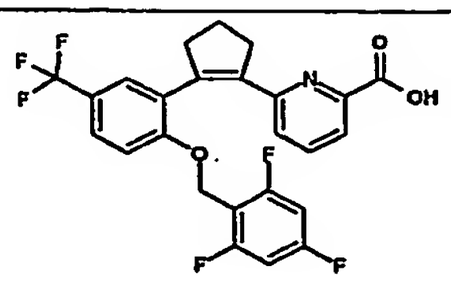
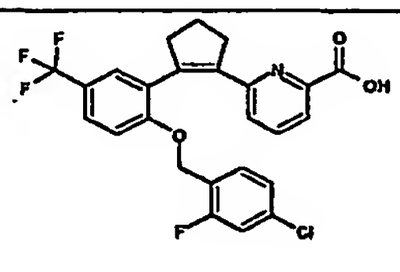
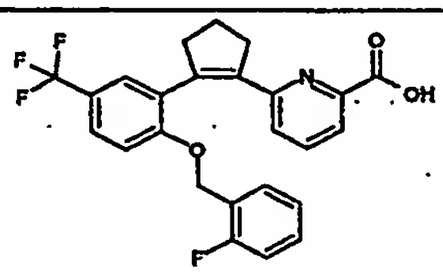
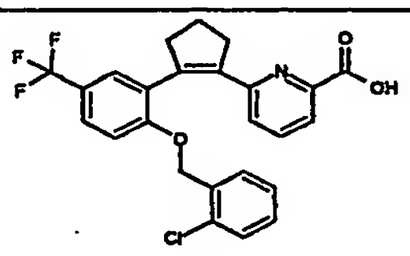
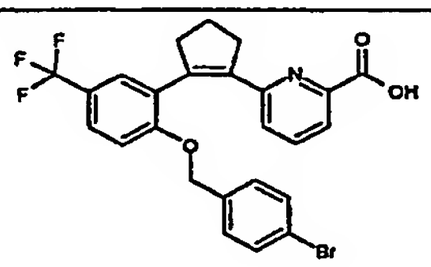
Standard Hydrolysis Procedure B

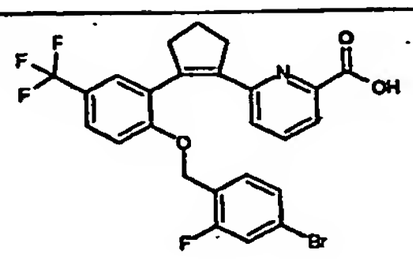
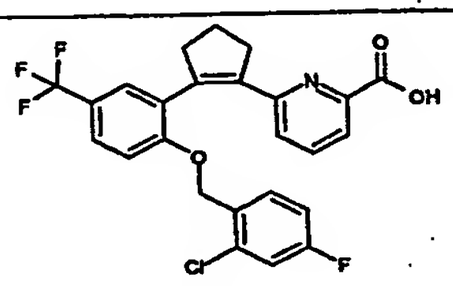
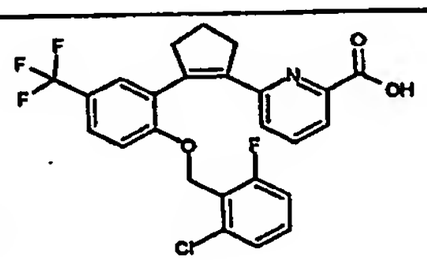
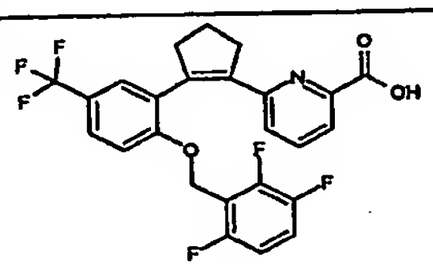
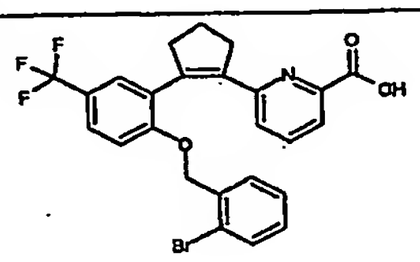


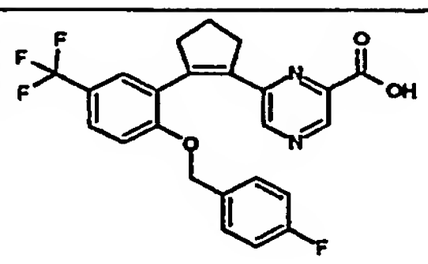
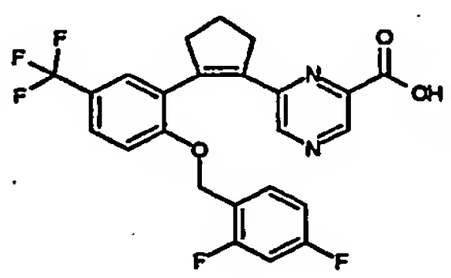
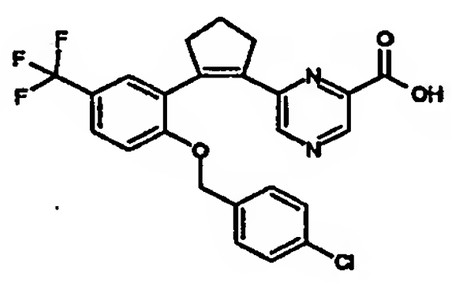
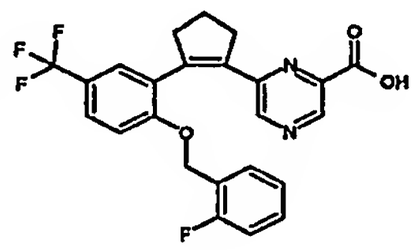
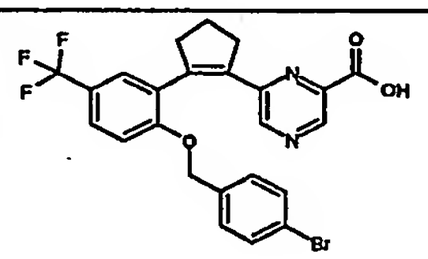
The ester (0.5mmol) was dissolved in methanol or ethanol (2ml) and 2M sodium hydroxide (1ml) added. The mixture was stirred at from room temperature to reflux for from 30minutes to 20 hours until the reaction was complete by tlc or heated at 120°C in a Smithcreator® microwave for 3 minutes then evaporated to dryness. The residue was dissolved in water/ethyl acetate or dichloromethane and the organic phase dried (magnesium sulphate), evaporated and the residue either dissolved in a small volume of ether and iso-hexane added to precipitate the salt or dissolved in dioxan and water and freeze-dried.

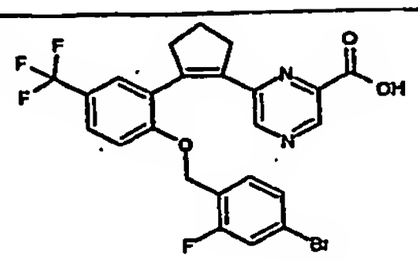
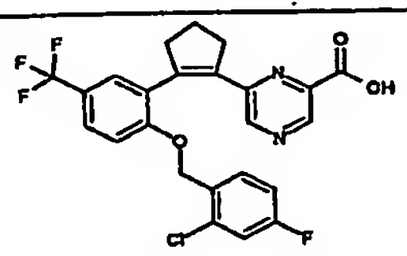
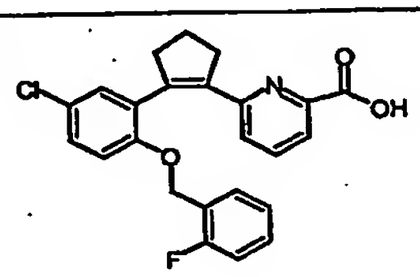
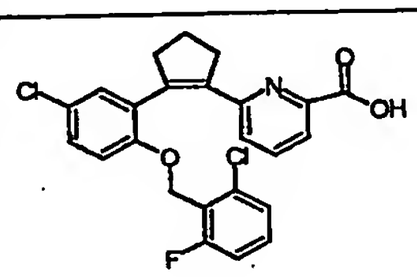
The following Examples were prepared by Standard Hydrolysis Procedure A:

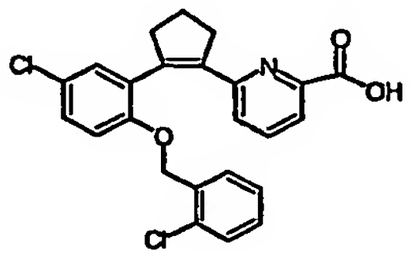
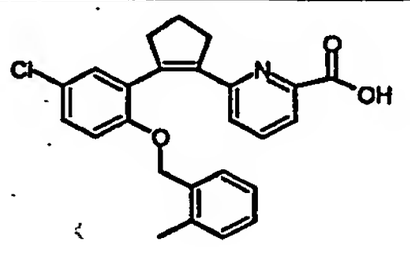
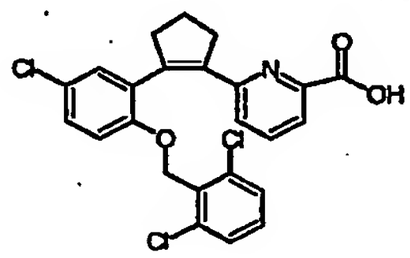
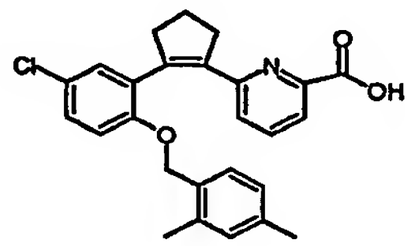
Example	Structure	Name	Data
5		6-{2-[2-{[(2,3-Difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS Rt = 3.91, [MH$^+$] 476
6		6-{2-[2-{[(4-Chlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS Rt = 3.97, [MH+] 474, 476

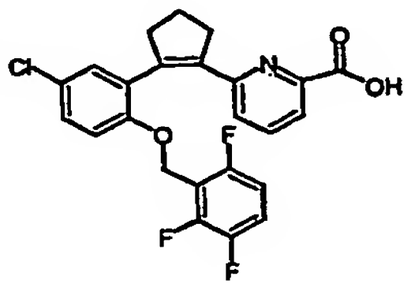
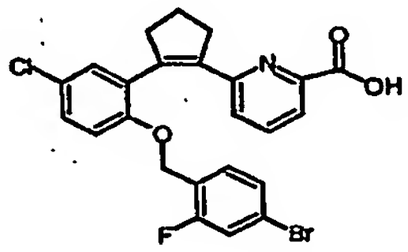
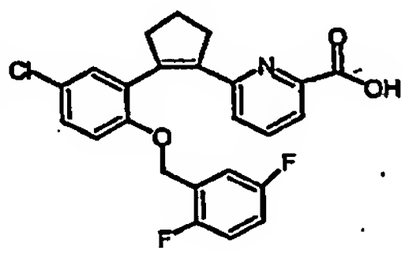
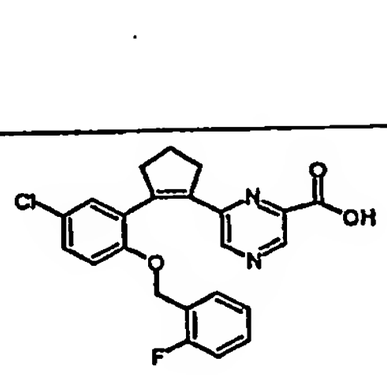
7		6-[2-(5-(Trifluoromethyl)-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS Rt = 3.82, [MH$^+$] 494
8		6-{2-[2-{[(4-Chloro-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS Rt = 4.05, [MH$^+$] 492, 494
9		6-{2-[2-{[(2-Fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS Rt = 3.83, [MH$^+$] 458
10		6-{2-[2-{[(2-Chlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS Rt = 4.05, [MH$^+$] 474, 476
11		6-{2-[2-{[(4-Bromophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS Rt = 4.08, [MH$^+$] 518, 520.

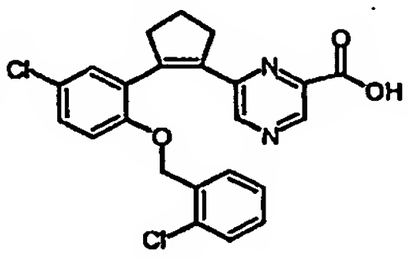
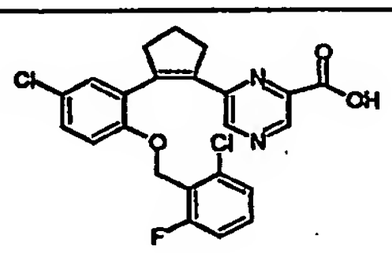
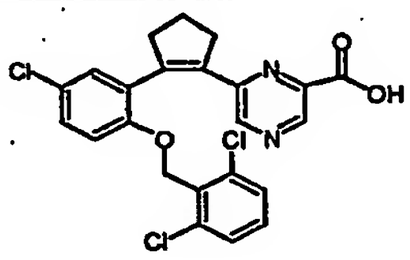
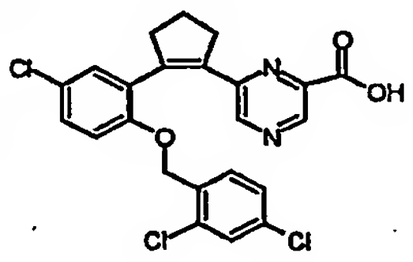
12		6-{2-[2-{[(4-Bromo-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS Rt = 4.13, [MH$^+$] 536, 538.
13		6-{2-[2-{[(2-Chloro-4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS Rt = 4.07 [MH$^+$] 492, 494.
14		6-{2-[2-{[(2-Chloro-6-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS Rt = 3.93 [MH$^+$] 492, 494
15		6-[2-(5-(Trifluoromethyl)-2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS Rt = 3.83 [MH$^+$] 494
16		6-{2-[2-{[(2-Bromophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS Rt = 4.10 [MH$^+$] 518, 520

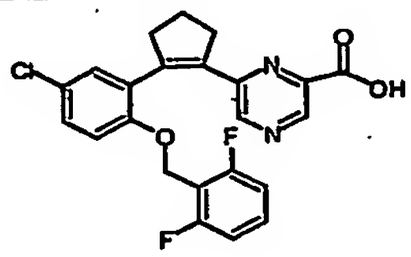
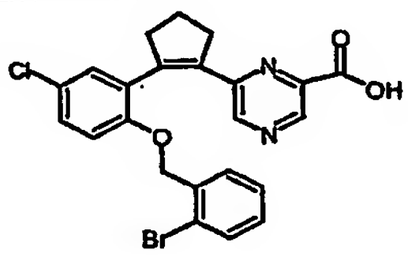
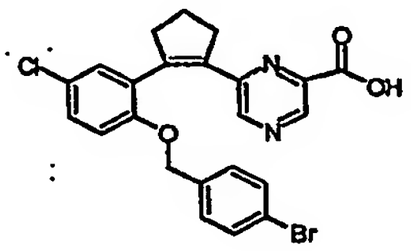
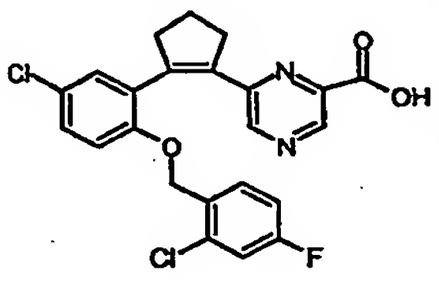
17		6-{2-[2-{[(4-Fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid	LC/MS Rt = 3.93 [MH^+] 459.
18		6-{2-[2-{[(2,4-Difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid	LC/MS Rt = 4.00, [MH^+] 477.
19		6-{2-[2-{[(4-Chlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid	LC/MS Rt = 4.08, [MH^+] 475, 477
20		6-{2-[2-{[(2-Fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid	LC/MS Rt = 3.89, [MH^+] 459
21		6-{2-[2-{[(4-Bromophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid	LC/MS Rt = 4.09, [MH^+] 517, 519

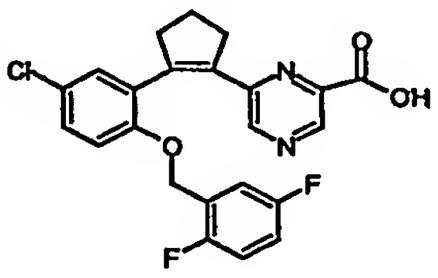
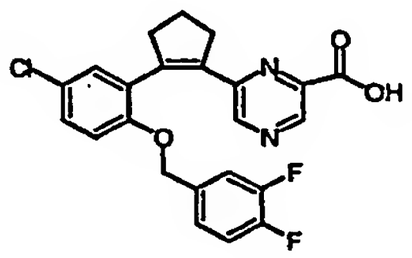
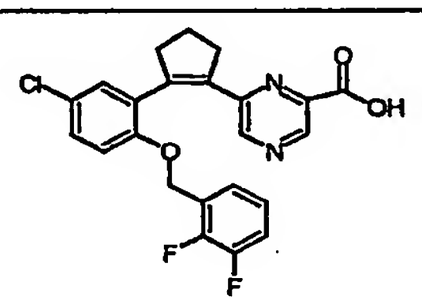
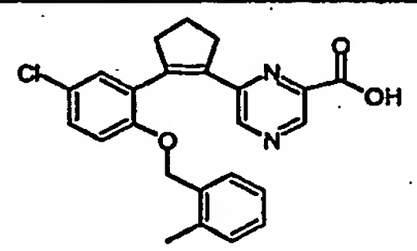
22		6-{2-[2-{[(4-Bromo-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid	LC/MS Rt = 4.15, [MH$^+$] 537, 539
23		6-{2-[2-{[(2-Chloro-4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid	LC/MS Rt = 4.04, [MH$^+$] 493/495
24		6-[2-(5-Chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.09-2.15 (2H, m), 2.86-2.92 (2H, m), 2.98-3.04 (2H, m), 4.97(2H, s), 6.93-7.02 (3H, m), 7.05-7.11 (2H, m), 7.23-7.27 (3H, m), 7.61-7.72 (1H, bs), 7.86-7.93 (1H, bs). LC/MS Rt = 3.60, [MH+] 424,426,427 [MH-] 422,424
25		6-[2-(5-Chloro-2-{[(2-chloro-6-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.02-2.06 (2H, m), 2.78-2.84 (2H, m), 2.93-2.97 (2H, m), 5.05(2H, s), 6.90 (1H, t), 7.07-7.09 (3H,m), 7.15-7.21(2H,m), 7.21-7.28 (1H, m), 7.63-7.67 (1H,m), 7.86 (1H, d). LC/MS Rt = 3.68, [MH+] 458,461 [MH-] 456,459

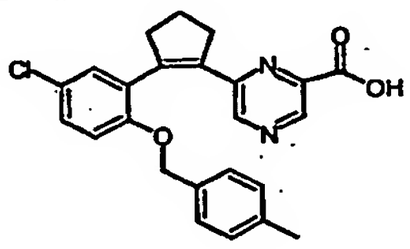
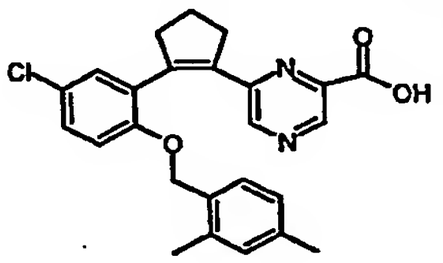
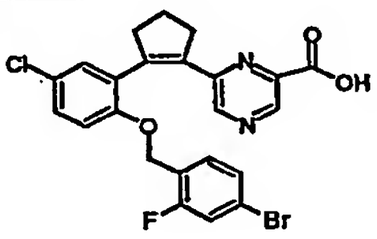
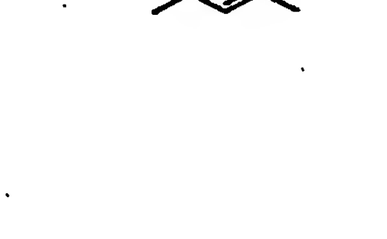
26		6-[2-(5-Chloro-2-{[(2-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.11-2.15 (2H, m), 2.90-2.94 (2H, m), 3.02-3.06 (2H, m), 5.00(2H, s), 6.92 (1H, d), 7.12-7.18 (3H, m), 7.19-7.31(4H, m), 7.69 (1H, t), 7.89 (1H, d). LC/MS Rt = 3.79, [MH+] 440,443 [MH-] 438,441
27		6-[2-(5-Chloro-2-{[(2-methylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$)δ: 2.07-2.1 (2H, m), 2.85-2.89 (2H, m), 2.98-3.02 (2H, m), 4.8 (2H, s), 6.94 (1H, d), 7.06-7.09 (4H,m), 7.14-7.18(1H,m), 7.23-7.26 (2H,m), 7.64-7.68 (1H, m), 7.87 (1H, d). LC/MS Rt = 3.68, [MH+] 420,422 [MH-] 418,420
28		6-[2-(5-Chloro-2-{[(2,6-dichlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.01-2.05 (2H, m), 2.85-2.87 (2H, m), 2.91-2.95 (2H, m), 5.24(2H, s), 7.09-7.32 (7H,m), 7.63-7.67 (1H, m), 7.86 (1H, d). LC/MS Rt = 3.81, [MH+] 476,478 [MH-] 474,476
29		6-[2-(5-Chloro-2-{[(2,4-dimethylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.05-2.11 (2H, m), 2.14 (3H,s), 2.26 (3H,s), 2.85-2.89 (2H, m), 2.97-3.01 (2H, m), 4.85(2H, s), 6.88 (1H, s), 6.92-6.96 (2H,m), 7.08 (1H,s), 7.22-7.26(3H,m), 7.66 (1H, t), 7.87 (1H, d). LC/MS Rt = 3.81, [MH+] 434,436 [MH-] 432,434

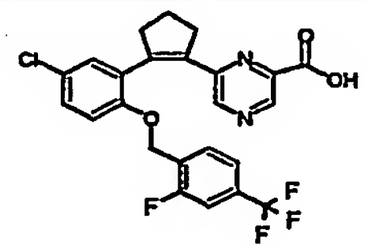
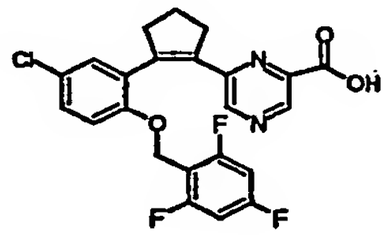
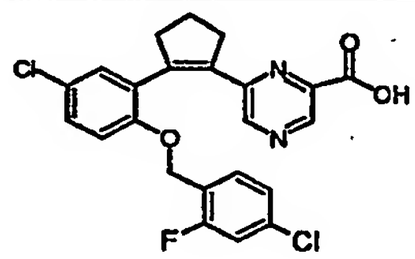
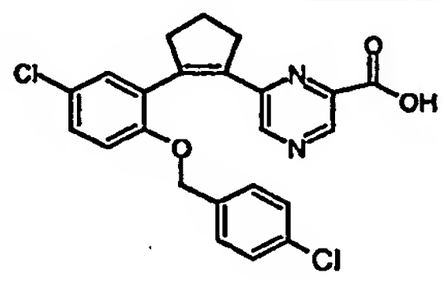
30		6-[2-(5-Chloro-2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.03-2.11 (2H, m), 2.81-2.85 (2H, m), 2.95-2.99 (2H, m), 5.0(2H, s), 6.73-6.75 (1H, m), 7.03-7.09 (3H, m), 7.25-7.29(2H, m), 7.68 (1H, t), 7.88 (1H, d). LC/MS Rt = 3.60, [MH+] 460,463
31		6-[2-(2-{[(4-Bromo-2-fluorophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.08-2.13 (2H, m), 2.86-2.89 (2H, m), 2.99-3.03 (2H, m), 4.93(2H, s), 6.93 (1H, d), 6.99 (1H, t), 7.01 (1H, s), 7.14-7.18 (2H,m), 7.25-7.27 (2H, m), 7.71 (1H, t), 7.91 (1H, d). LC/MS Rt = 3.86, [MH+] 504,506 [MH-] 502,503
32		6-[2-(5-Chloro-2-{[(2,5-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.13-2.16(2H, m), 2.89-2.93 (2H, m), 3.02-3.07 (2H, m), 4.94(2H, s), 6.78-6.81 (1H, m), 6.90-6.96 (3H, m), 7.14 (1H, bs), 7.25-7.27 (2H, m), 7.69-7.71 (1H, m), 7.86-7.89 (1H, m). LC/MS Rt = 3.86, [MH+] 504,506 [MH-] 502,503
33		6-[2-(5-Chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.10-2.18(2H, m), 2.91-2.95 (2H, m), 3.02-3.06 (2H, m), 4.94(2H, s), 6.96-7.29 (7H, m), 8.53 (1H,s), 9.04 (1H,s). LC/MS Rt = 4.32, [MH+] 425,427 [MH-] 423,425

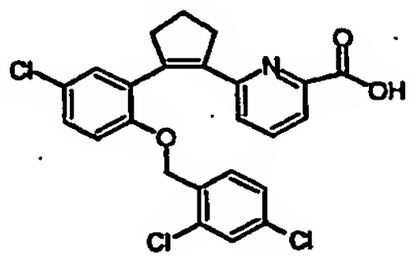
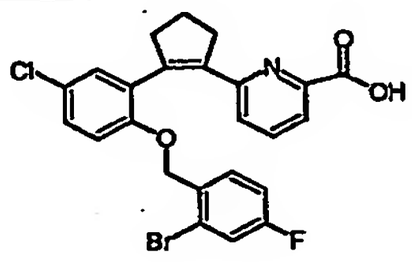
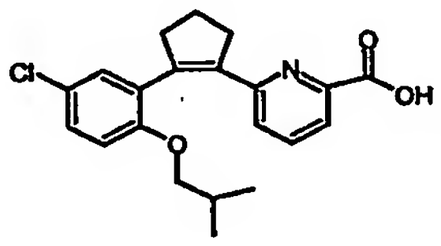
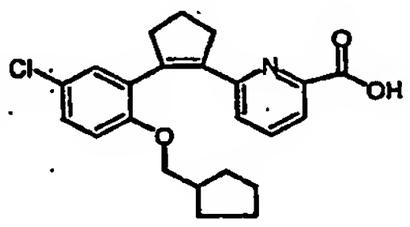
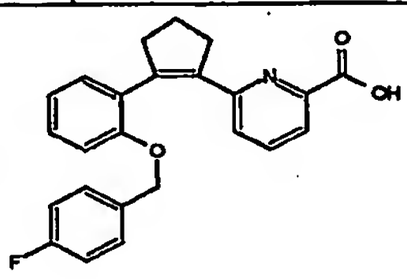
34		6-[2-(5-Chloro-2-{[(2-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.12-2.20(2H, m), 2.94-2.97 (2H, m), 3.05-3.08 (2H, m), 4.98 (2H, s), 6.95 (1H, d), 7.12-7.31 (6H, m), 8.55 (1H,s), 9.03(1H,s). LC/MS Rt = 4.65, [MH+] 441,444 [MH-] 439,443
35		6-[2-(5-Chloro-2-{[(2-chloro-6-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.06-2.10(2H, m), 2.85-2.88 (2H, m), 2.96-2.99 (2H, m), 5.02 (2H, s), 6.90 (1H, t, J=8.9Hz), 7.06-7.12 (2H, m), 7.16-7.2 (2H,m), 7.30 (1H,dd, J=8.8 J=2.6Hz), 8.48 (1H,s), 9.03(1H,s). LC/MS Rt = 4.40, [MH+] 459,462 [MH-] 457,460
36		6-[2-(5-Chloro-2-{[(2,6-dichlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.05-2.09(2H, m), 2.85-2.89 (2H, m), 2.94-2.97 (2H, m), 5.11 (2H, s), 7.09 (1H, d, J=8.8Hz), 7.06-7.12 (2H, m), 7.15-7.32 (5H,m), 8.48 (1H,s), 9.02(1H,s). LC/MS Rt = 4.62, [MH+] 477,479 [MH-] 475,477
37		6-[2-(5-Chloro-2-{[(2,4-dichlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR(DMSO) δ: 1.97-2.03(2H, m), 2.81-2.85 (2H, m), 2.95-2.98 (2H, m), 5.10 (2H, s), 7.06 (1H, d), 7.17 (1H, d), 7.26 (1H,d), 7.33 (1H,dd), 7.43 (1H, dd), 7.63 (1H, d), 7.80 (1H,s), 8.58(1H,s). LC/MS Rt = 4.92, [MH+] 477,479 [MH-] 475,477

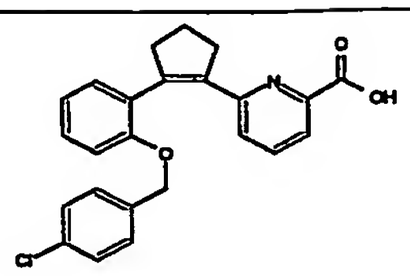
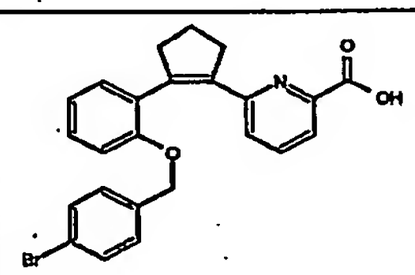
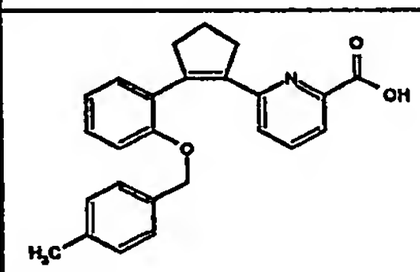
38		6-[2-(5-Chloro-2-{[(2,6-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR(DMSO) δ: 1.89-1.97(2H, m), 2.75-2.79 (2H, m), 2.89-2.93 (2H, m), 5.06 (2H, s), 7.03-7.11 (3H, m), 7.30 (1H, d), 7.38-7.47 (2H, m), 7.96(1H,s), 8.75(1H,s). LC/MS Rt = 4.65, [MH+] 443,445 [MH-] 441,443
39		6-[2-(2-{[(2-Bromophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.14-2.18(2H, m), 2.94-2.98 (2H, m), 3.05-3.09 (2H, m), 4.95 (2H, s), 6.94 (1H, d), 7.11-7.19 (4H, m), 7.27-7.29 (1H, m), 7.48 (1H, d), 8.54(1H,s), 9.03(1H,s). LC/MS Rt = 4.75, [MH+] 487,489 [MH-] 485,487
40		6-[2-(2-{[(4-Bromophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR($CDCl_3$) δ: 2.12-2.16(2H, m), 2.91-2.95 (2H, m), 3.05-3.09 (2H, m), 4.85 (2H, s), 6.88 (1H, d), 6.99 (2H, d), 7.11 (1H, bs), 7.23-7.25 (1H, m), 7.39 (2H), 8.51(1H,s), 9.04(1H,s). LC/MS Rt = 4.64, [MH+] 487,488 [MH-] 485,487
41		6-[2-(5-Chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.13-2.17(2H, m), 2.91-2.95 (2H, m), 3.05-3.08 (2H, m), 4.94 (2H, s), 6.89-6.95 (2H, m), 7.07 (1H, dd), 7.11-7.15(2H, m), 7.27-7.30 (1H, m), 8.55(1H,s), 9.06(1H,s). LC/MS Rt = 4.59, [MH+] 459,462 [MH-] 457,461

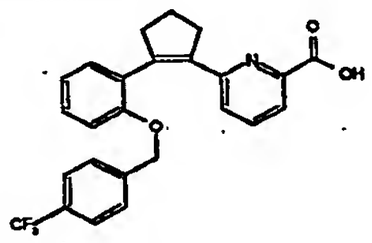
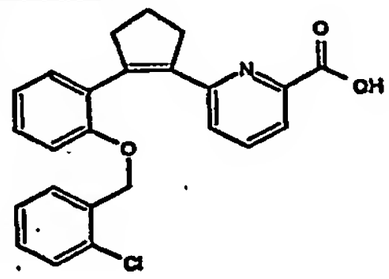
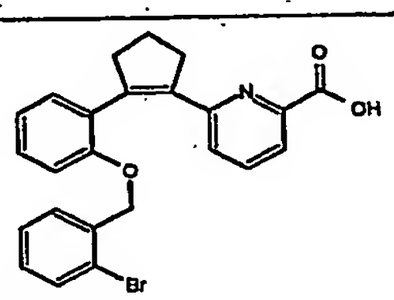
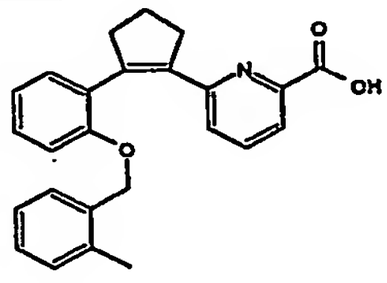
42		6-[2-(5-Chloro-2-{[(2,5-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.12-2.21(2H, m), 2.92-2.98 (2H, m), 3.03-3.11 (2H, m), 4.94 (2H, s), 6.78-6.84 (1H, m), 6.91-6.98 (3H, m), 7.15(1H, s), 7.26-7.31 (1H, m), 8.55(1H,s), 9.06(1H,s). LC/MS Rt = 4.29, [MH+] 443,445 [MH-] 441,443
43		6-[2-(5-Chloro-2-{[(3,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.15-2.21(2H, m), 2.91-2.97 (2H, m), 3.08-3.11 (2H, m), 4.86 (2H, s), 6.81-6.85 (1H, m), 6.89 (1H, d), 6.92-6.97(1H, m), 7.03-7.12 (1H, m), 7.14 (1H, s), 7.26-7.31 (1H,m), 8.58(1H,s), 9.08(1H,s). LC/MS Rt = 4.29, [MH+] 443,445 [MH-] 441,443
44		6-[2-(5-Chloro-2-{[(2,3-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.12-2.19(2H, m), 2.89-2.95 (2H, m), 3.03-3.10 (2H, m), 4.98 (2H, s), 6.81-6.87 (1H, m), 6.92-6.97(2H, m), 7.04-7.14 (2H, m), 7.26-7.31 (1H,m), 8.56(1H,s), 9.06(1H,s). LC/MS Rt = 4.34, [MH+] 443,445 [MH-] 441
45		6-[2-(5-Chloro-2-{[(2-methylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.95-2.03(2H, m), 2.19 (3H,s), 2.83-2.86 (2H, m), 2.96-3.0 (2H, m), 5.01 (2H, s), 7.08-7.18 (5H, m), 7.23 (1H, d), 7.36 (1H, dd), 8.03 (1H,s), 8.73 (1H,s). LC/MS Rt = 4.42, [MH+] 421,423 [MH-] 419,421

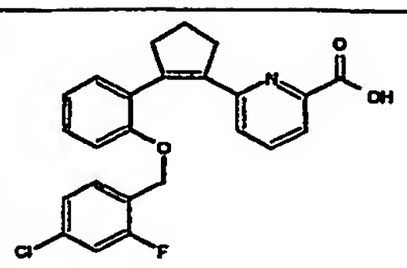
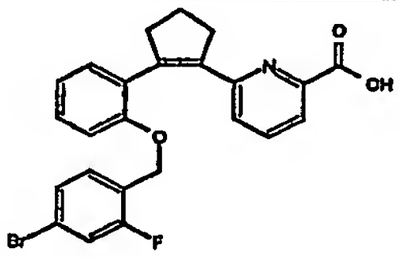
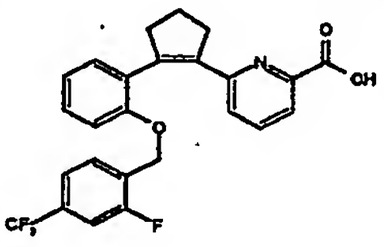
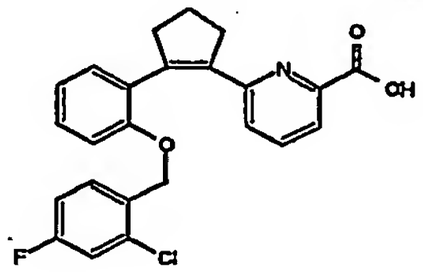
46		6-[2-(5-Chloro-2-{[(4-methylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.96-2.03(2H, m), 2.25 (3H,s), 2.84-2.86 (2H, m), 2.95-2.99 (2H, m), 4.97 (2H, s), 7.02-7.14 (6H, m), 7.31 (1H, dd, J=8.8, 2.8 Hz), 7.95 (1H,s), 8.69 (1H,s). LC/MS Rt = 4.42, [MH+] 421[MH-] 419,421
47		6-[2-(5-Chloro-2-{[(2,4-dimethylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.91-1.99(2H, m), 2.13 (3H, s), 2.21 (3H, s), 2.83-2.90 (2H, m), 2.96-3.0 (2H, m), 4.94 (2H, s), 6.95-7.04 (3H, m), 7.18-7.24 (2H, m), 7.36-7.40 (1H, m), 8.10 (1H,s), 8.77 (1H,s), 13.65 (1H,s). LC/MS Rt = 4.64, [MH+] 435[MH-] 433,436
48		6-[2-(2-{[(4-Bromo-2-fluorophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.12-2.16(2H, m), 2.87-2.91(2H, m), 2.99-3.07 (2H, m), 4.91 (2H, s), 6.93-7.01 (2H, m), 7.12 (1H, bs), 7.18 (1H, d), 7.26-7.29 (1H, m), 8.53 (1H,s), 9.07 (1H,s). LC/MS Rt = 4.64, [MH+] 505,507[MH-] 502,505
49		6-[2-(2-{[(2-Bromo-4-fluorophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.13-2.17(2H, m), 2.92-2.96(2H, m), 3.05-3.09 (2H, m), 4.92 (2H, s), 6.92-6.96 (2H, m), 7.10-7.14 (2H, m), 7.24-7.30 (2H, m), 8.54 (1H,s), 9.06 (1H,s). LC/MS Rt = 4.67, [MH+] 505,507[MH-] 503,505

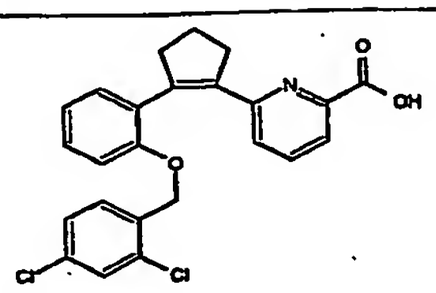
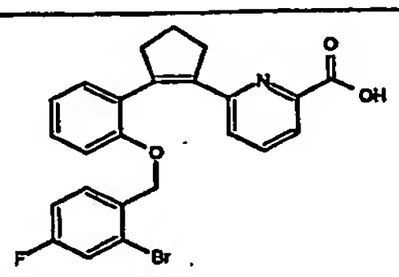
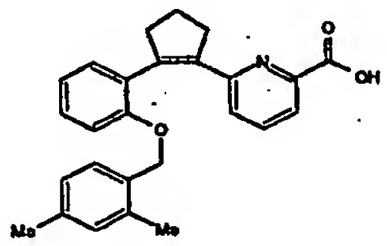
50		6-{2-[5-Chloro-2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.99-2.03(2H, m), 2.85-2.88(2H, m), 2.97-3.01 (2H, m), 5.15 (2H, s), 7.18 (1H, d), 7.23 (1H, d), 7.37 (1H, dd), 7.42 (1H, t), 7.54 (1H, d), 7.63 (1H, d), 8.06 (1H,s), 8.74 (1H,s). LC/MS Rt = 4.46, [MH+] 493,495[MH-] 491,493
51		6-[2-(5-Chloro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.91-1.99(2H, m), 2.78-2.81 (2H, m), 2.90-2.94 (2H, m), 4.96 (2H, s), 7.12 (2H, t), 7.21 (1H, d), 7.28 (1H, d), 7.39 (1H, dd), 8.07 (1H,s), 8.81 (1H,s), 13.65 (1H,s). LC/MS Rt = 4.20, [MH+] 461,463[MH-] 459,461
52		6-[2-(5-Chloro-2-{[(4-chloro-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.96-2.04(2H, m), 2.78-2.83 (2H, m), 2.90-2.98 (2H, m), 5.04 (2H, s), 7.12-7.24 (4H, m), 7.32-7.40 (2H, m), 8.07 (1H,s), 8.79 (1H,s). LC/MS Rt = 4.55, [MH+] 459,462[MH-] 457,460
53		6-[2-(5-Chloro-2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.91-2.05(2H, m), 2.86-2.90 (2H, m), 2.98-3.01 (2H, m), 4.99 (2H, s), 7.12-7.18 (4H, m), 7.33-7.46 (3H, m), 8.06 (1H,s), 8.74 (1H,s). LC/MS Rt = 4.51, [MH+] 441,444[MH-] 439,442

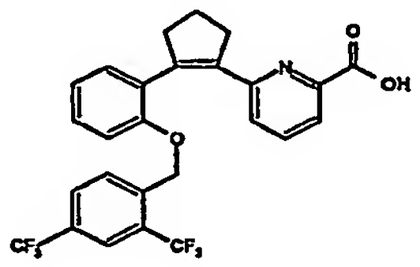
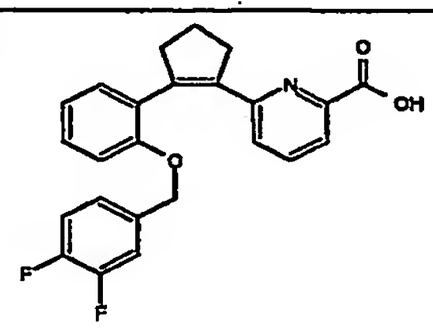
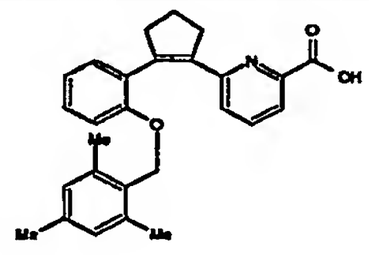
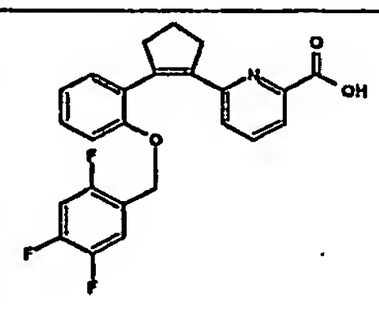
54		6-[2-(5-Chloro-2-{[(2,4-dichlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS Rt = 4.01, [MH+] 476,478
55		6-[2-(2-{[(2-Bromo-4-fluorophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS Rt = 4.01, [MH+] 504,506[MH-] 502,503
56		6-(2-{5-Chloro-2-[(2-methylpropyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylic acid	LC/MS Rt = 3.96, [MH+] 372,374
57		6-(2-{5-Chloro-2-[(cyclopentylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylic acid	LC/MS Rt = 4.26, [MH+] 398,400[MH-] 396,398
58		6-[2-(2-{[(4-Fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.95-2.03 (2H, m), 2.83-2.87 (2H, m), 2.99-3.33 (2H, m), 5.01 (2H, s), 6.90-6.92 (1H, m), 6.99 (1H, d), 7.04 (1H, dd), 7.09-7.13 (3H, m), 7.22-7.28 (3H, m), 7.58-7.62 (1H, m), 7.74 (1H, d), 12.55-12.95 (1H, br s). LC/MS: Rt = 3.39 min, [M–H] 388, 390.

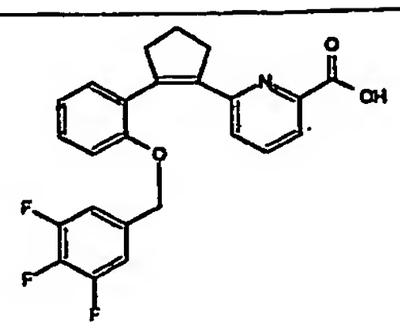
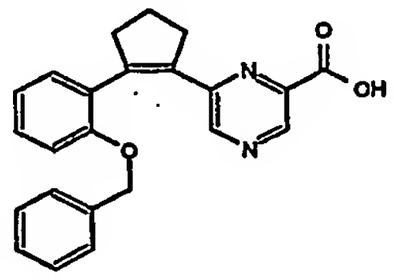
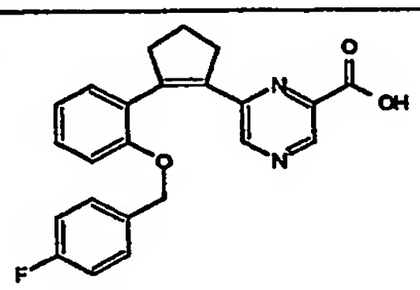
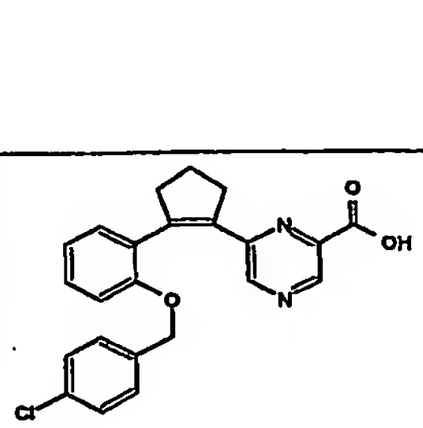
59		6-[2-(2-{[(4-Chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.95-2.03 (2H, m), 2.83-2.87 (2H, m), 3.00-3.34 (2H, m), 5.03 (2H, s), 6.89-6.93 (1H, m), 7.00 (1H, d), 7.05 (1H, dd), 7.09 (1H, d), 7.20-7.22 (2H, m), 7.24-7.30 (1H, m), 7.34-7.36 (2H, m), 7.55-7.59 (1H, m), 7.72 (1H, d). LC/MS: Rt = 3.68 min, [M+H] 406.
60		6-[2-(2-{[(4-Bromophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.96-2.03 (2H, m), 2.83-2.87 (2H, m), 3.00-3.03 (2H, m), 5.01 (2H, s), 6.89-6.93 (1H, m), 6.96 (1H, d), 7.05 (1H, dd), 7.08 (1H, d), 7.15 (2H, d), 7.24-7.28 (1H, m), 7.48 (2H, d), 7.56-7.60 (1H, m), 7.73 (1H), 12.55-12.95 (1H, br s). LC/MS: Rt = 3.77 min, [M+H] 452.
61		6-[2-(2-{[(4-Methylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.94-2.01 (2H, m), 2.26 (3H, s), 2.83-2.87 (2H, m), 2.98-3.02 (2H, m), 5.00 (2H, s), 6.86-6.89 (1H, m), 6.92 (1H, d), 7.00 (1H, dd) 7.09-7.11 (5H, m), 7.22-7.26 (1H, m), 7.52-7.55 (1H, m), 7.69 (1H, d, J=7.5Hz). LC/MS: Rt = 3.56 min, [M+H] 386.

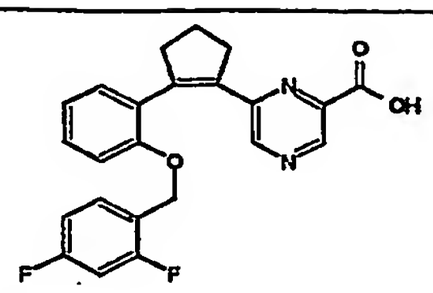
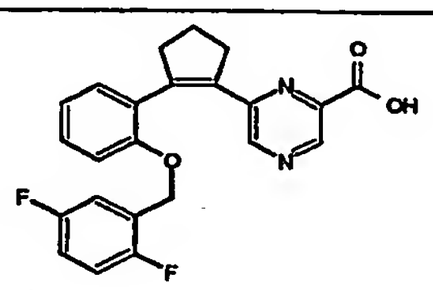
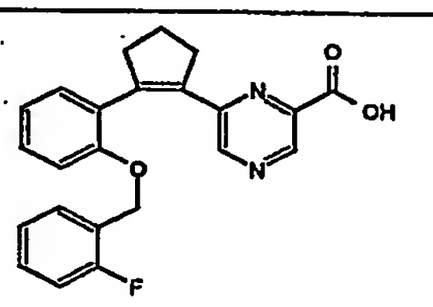
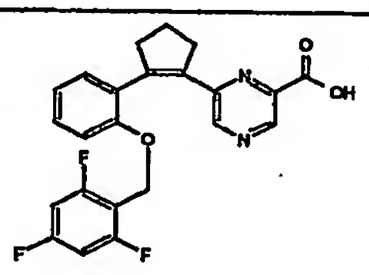
62		6-{2-[2-({[4-(Trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.97-2.05 (2H, m), 2.86-2.89 (2H, m), 3.02-3.05 (2H, m), 5.14 (2H, s), 6.91-6.95 (1H, m), 6.98 (1H, d), 7.07-7.11 (2H, m), 7.25-7.28 (1H, m), 7.41 (2H, d), 7.56-7.60 (1H, m), 7.66 (2H, d), 7.71 (1H, d). LC/MS: Rt = 3.76 min, [M+H] 440.
63		6-[2-(2-{[(2-Chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.95-2.02 (2H, m), 2.84-2.88 (2H, m), 3.00-3.03 (2H, m), 5.10 (2H, s), 6.91-6.95 (1H, m), 6.99 (1H, d), 7.04 (1H, dd), 7.14 (1H, d), 7.25-7.32 (4H, m), 7.45 (1H, d), 7.58-7.62 (1H, m), 7.73 (1H, d). LC/MS: Rt = 3.83 min, [M+H] 406.
64		6-[2-(2-{[(2-Bromophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.11-2.18 (2H, m), 2.95-2.88 (2H, m), 3.03-3.08 (2H, m), 5.00 (2H, s), 6.99-7.04 (2H, m), 7.09-7.21 (4H, m), 7.28-7.35 (2H, m), 7.49 (1H, dd), 7.64-7.68 (1H, m), 7.86 (1H, d). LC/MS: Rt = 3.77 min, [M+H] 450.
65		6-[2-(2-{[(2-Methylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.93-2.01 (2H, m), 2.23 (3H, s), 2.81-2.84 (2H, m), 2.99-3.02 (2H, m), 5.05 (2H, s), 6.86-6.90 (1H, m), 6.96 (1H, dd), 7.00 (1H, dd), 7.10-7.20 (5H, m), 7.56-7.60 (1H, m), 7.73 (1H, dd), 12.43-13.10 (1H, br s). LC/MS: Rt = 3.64 min, [M+H] 386.

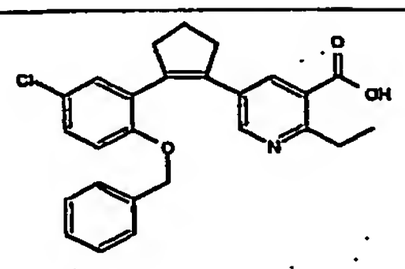
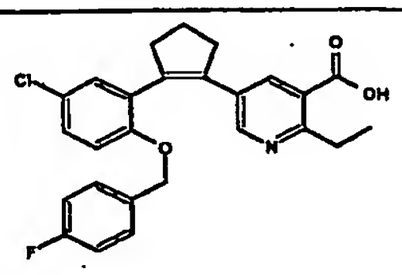
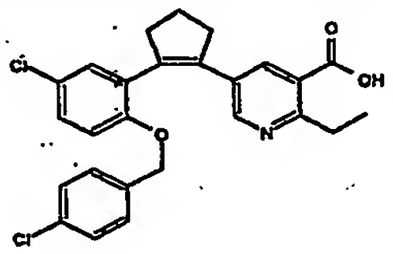
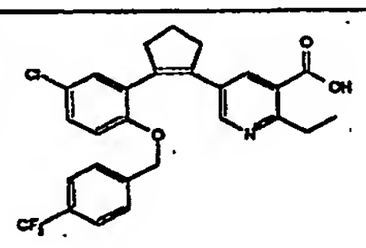
66		6-[2-(2-{[(4-Chloro-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.08-2.16 (2H, m), 2.90-2.94 (2H, m), 3.00-3.04 (2H, m), 4.98 (2H, s), 6.99-7.03 (3H, m), 7.08-7.13 (2H, m), 7.28-7.31 (3H, m), 7.66-7.70 (1H, m), 7.87 (1H, d, J=7.6Hz). LC/MS: Rt = 3.75 min, [M+H] 424.
67		6-[2-(2-{[(4-Bromo-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.93-2.01 (2H, m), 2.80-2.84 (2H, m), 2.98-3.01 (2H, m), 5.05 (2H, s), 6.91-6.94 (2H, m), 7.03 (1H, dd), 7.18-7.23 (2H, m), 7.30-7.32 (1H, m), 7.38 (1H, dd), 7.53 (1H, dd), 7.56-7.60 (1H, m), 7.72 (1H, d, J=7.2Hz), 12.56-13.05 (1H, br s). LC/MS: Rt = 3.96 min, [M+H] 470.
68		6-{2-[2-({[2-Fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.96-2.03 (2H, m), 2.83-2.87 (2H, m), 3.00-3.04 (2H, m), 5.16 (2H, s), 6.93-6.97 (2H, m), 7.07 (1H, d), 7.18 (1H, d), 7.28-7.32 (1H, m), 7.44-7.48 (1H, m), 7.52-7.59 (2H, m), 7.65 (1H, d), 7.70 (1H, d). LC/MS: Rt = 3.98 min, [M+H] 458.
69		6-[2-(2-{[(2-Chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.10-2.27 (2H, m), 2.92-2.96 (2H, m), 3.02-3.06 (2H, m), 5.00 (2H, s), 6.85-6.90 (1H, m), 6.99-7.07 (3H, m), 7.13 (1H, dd), 7.19-7.21 (1H, m), 7.28-7.34 (2H, m), 7.66-7.70 (1H, m), 7.87 (1H, d). LC/MS: Rt = 3.76 min, [M+H] 424.

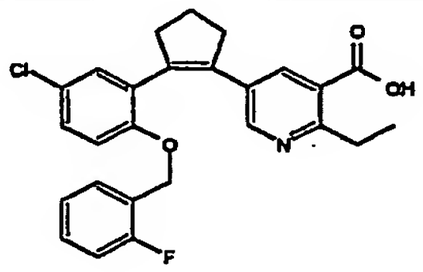
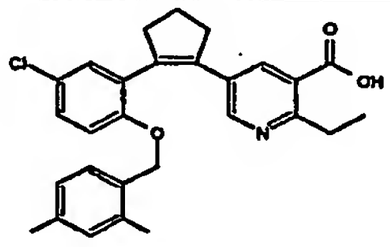
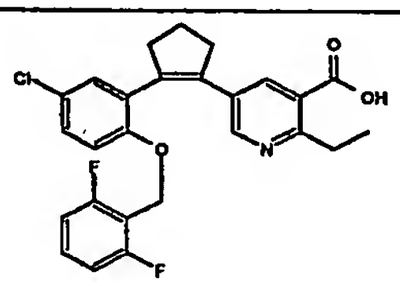
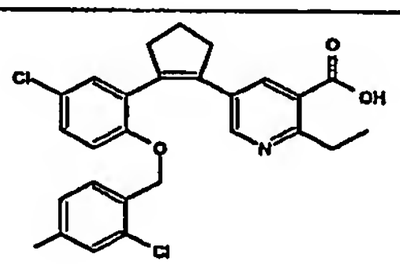
70		6-[2-(2-{[(2,4-Dichlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.10-2.18 (2H, m), 2.93-2.96 (2H, m), 3.02-3.06 (2H, m), 5.00 (2H, s), 6.98-7.04 (2H, m), 7.11-7.17 (3H, m), 7.28-7.34 (3H, m), 7.67-7.71 (1H, m), 7.87 (1H, d). LC/MS: Rt = 4.08 min, [M+H] 440.
71		6-[2-(2-{[(2-Bromo-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.94-2.02 (2H, m), 2.83-2.87 (2H, m), 2.99-3.03 (2H, m), 5.02 (2H, s), 6.94-6.99 (2H, m), 7.05 (1H, dd), 7.14 (1H, d), 7.19-7.23 (1H, m), 7.30-7.37 (2H, m), 7.57-7.61 (2H, m), 7.72 (1H, d), 12.56-12.94 (1H, br s). LC/MS: Rt = 3.81 min, [M+H] 468.
72		6-[2-(2-{[(2,4-Dimethylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.92-2.00 (2H, m), 2.18 (3H, s), 2.22 (3H, s), 2.79-2.83 (2H, m), 2.97-3.01 (2H, m), 5.00 (2H, s), 6.87-6.94 (4H, m), 6.98 (1H, dd), 7.06 (1H, d), 7.19 (1H, d), 7.28-7.30 (1H, m), 7.55-7.59 (1H, m), 7.72 (1H, dd), 12.52-12.87 (1H, br s). LC/MS: Rt = 3.70 min, [M–H] 398, 400.

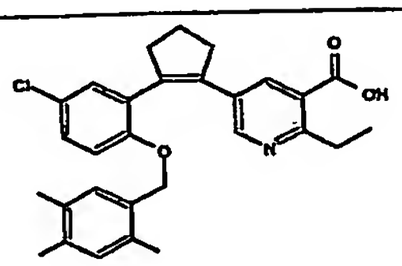
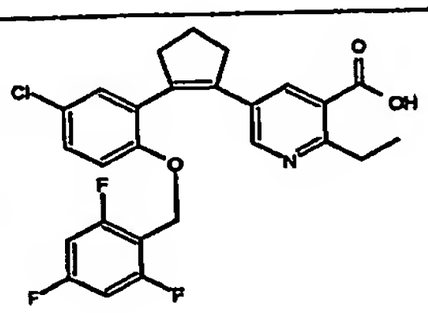
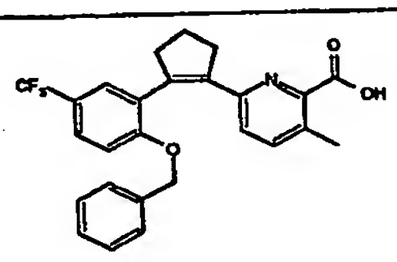
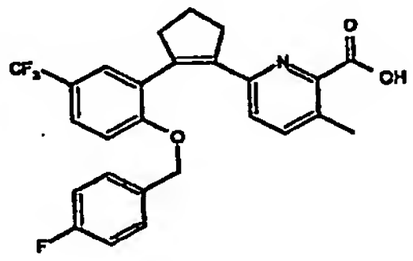
73		6-{2-[2-({[2,4-Bis(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.97-2.05 (2H, m), 2.85-2.89 (2H, m), 3.02-3.06 (2H, m), 5.20 (2H, s), 6.97-7.02 (2H, m), 7.08 (1H, d), 7.14 (1H, dd), 7.27-7.31 (1H, m), 7.58-7.62 (1H, m), 7.66-7.71 (2H, m), 8.02 (1H, d), 12.61-13.05 (1H, br s). LC/MS: Rt = 4.10 min [M+H] 508.
74		6-[2-(2-{[(3,4-Difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.96-2.04 (2H, m), 2.84-2.88 (2H, m), 3.01-3.04 (2H, m), 5.00 (2H, s), 6.92-6.95 (1H, m), 6.99 (1H, d), 7.07-7.11 (3H, m), 7.15-7.20 (1H, m), 7.26-7.40 (2H, m), 7.58-7.62 (1H, m), 7.73 (1H, d), 12.41-12.98 (1H, br s). LC/MS: Rt = 3.52 min, [M–H] 406, 408.
75		6-[2-(2-{[(2,4,6-Trimethylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.84-1.92 (2H, m), 2.18 (9H, s), 2.70-2.74 (2H, m), 2.90-2.94 (2H, m), 4.98 (2H, s), 6.81 (2H, s), 6.90-6.96 (3H, m), 7.31-7.33 (2H, m), 7.56-7.60 (1H, m), 7.71 (1H, dd). LC/MS: Rt = 3.76 min, [M–H] 412, 414.
76		6-[2-(2-{[(2,4,5-Trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.94-2.02 (2H, m), 2.81-2.85 (2H, m), 2.98-3.02 (2H, m), 5.02 (2H, s), 6.95-6.97 (2H, m), 7.07 (1H, dd), 7.18 (1H, d), 7.24-7.33 (2H, m), 7.50-7.61 (2H, m), 7.72 (1H, dd), 12.57-12.87 (1H, br s). LC/MS: Rt = 3.58 min, [M+H] 426.

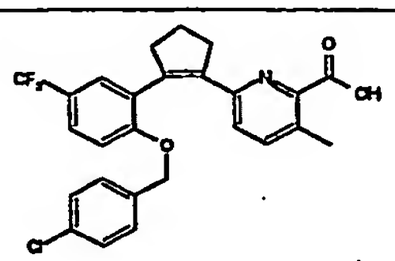
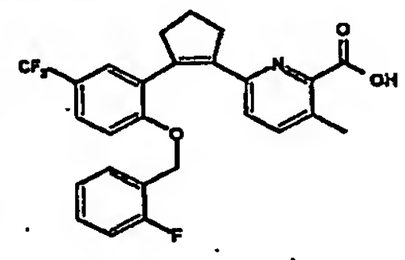
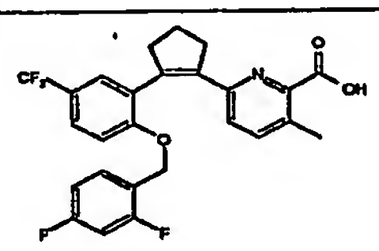
77		6-[2-(2-{[(3,4,5-Trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.98-2.05 (2H, m), 2.86-2.89 (2H, m), 3.02-3.06 (2H, m), 4.98 (2H, s), 6.97-7.00 (2H, m), 7.03-7.09 (3H, m), 7.13 (1H, dd), 7.27-7.29 (1H, m), 7.58-7.61 (1H, m), 7.73 (1H, d). LC/MS: Rt = 3.68 min, [M–H] 424, 426.
78		6-(2-{2-[(Phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyrazinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.99-2.06 (2H, m), 2.90-2.94 (2H, m), 2.99-3.02 (2H, m), 5.03 (2H, s), 6.92-6.96 (1H, m), 7.11 (1H, dd), 7.14-7.19 (3H, m), 7.25-7.34 (4H, m), 8.11 (1H, s), 8.80 (1H, s), 13.28-13.89 (1H, br s). LC/MS: Rt = 4.18 min, [M+H] 373.
79		6-[2-(2-{[(4-Fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.98-2.06 (2H, m), 2.89-2.93 (2H, m), 2.98-3.02 (2H, m), 4.99 (2H, s), 6.93-6.97 (1H, m), 7.08-7.17 (4H, m), 7.20-7.24 (2H, m), 7.30-7.34 (1H, m), 8.09 (1H, s), 8.79 (1H, s), 13.20-13.95 (1H, br s). LC/MS: Rt = 4.16 min, [M–H] 389, 391.
80		6-[2-(2-{[(4-Chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.99-2.06 (2H, m), 2.89-2.93 (2H, m), 2.93-3.02 (2H, m), 5.01 (2H, s), 6.94-6.97 (1H, m), 7.11-7.15 (2H, m), 7.19 (2H, d), 7.30-7.35 (3H, m), 8.09 (1H, s), 8.80 (1H, s), 13.21-13.89 (1H, br s). LC/MS: Rt = 4.50 min, [M–H] 405, 407.

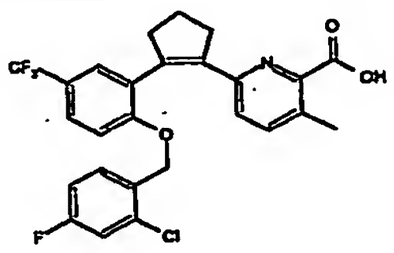
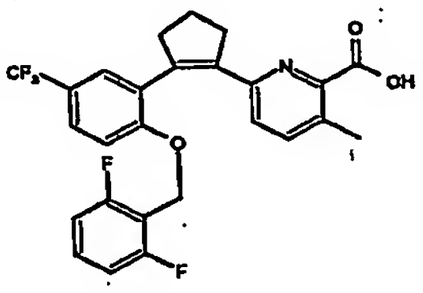
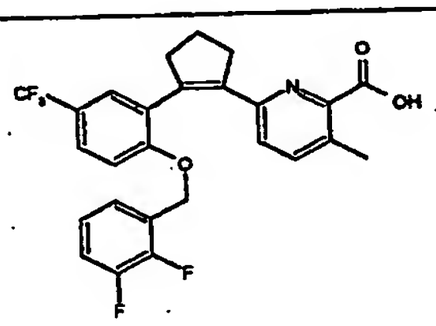
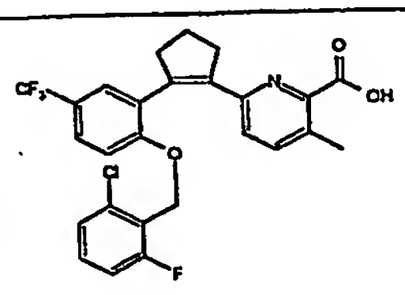
81		6-[2-(2-{[(2,4-Difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.96-2.03 (2H, m), 2.85-2.89 (2H, m), 2.95-2.99 (2H, m), 5.02 (2H, s), 6.94-7.01 (2H, m), 7.11 (1H, dd), 7.16-77.23 (2H, m), 7.29-7.38 (2H, m), 8.05 (1H, s), 8.78 (1H, s), 13.19-13.78 (1H, br s). LC/MS: Rt = 4.20 min, [M–H] 407, 409.
82		6-[2-(2-{[(2,5-Difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.98-2.05 (2H, m), 2.87-2.91 (2H, m), 2.98-3.01 (2H, m), 5.06 (2H, s), 6.97-7.02 (2H, m), 7.13 (1H, dd), 7.16-7.23 (3H, m), 7.33-7.37 (1H, m), 8.08 (1H, s), 8.78 (1H, s), 13.30-13.78 (1H, br s). LC/MS: Rt = 4.22 min, [M+H] 409.
83		6-[2-(2-{[(2-Fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.96-2.04 (2H, m), 2.86-2.90 (2H, m), 2.96-3.00 (2H, m), 5.01 (2H, s), 6.94-6.98 (1H, m), 7.08-7.28 (5H, m), 7.32-7.34 (2H, m), 8.08 (1H, s), 8.79 (1H, s), 13.20-13.88 (1H, br s). LC/MS: Rt = 4.14 min, [M–H] 389, 391.
84		6-[2-(2-{[(2,4,6-Trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	^{1}H NMR (DMSO) δ: 1.91-1.99 (2H, m), 2.79-2.83 (2H, m), 2.91-2.94 (2H, m), 5.01 (2H, s), 6.97-7.00 (1H, m), 7.09-7.15 (3H, m), 7.28 (1H, d), 7.34-7.40 (1H, m), 7.99 (1H, s), 8.78 (1H, s), 13.31-13.79 (1H, br s).

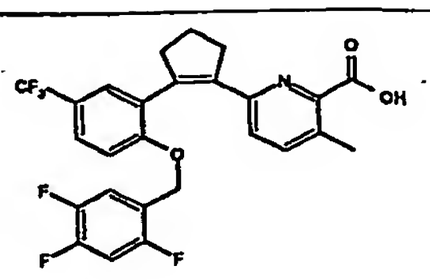
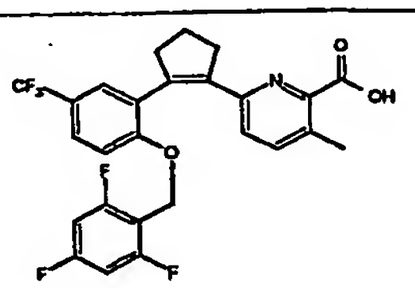
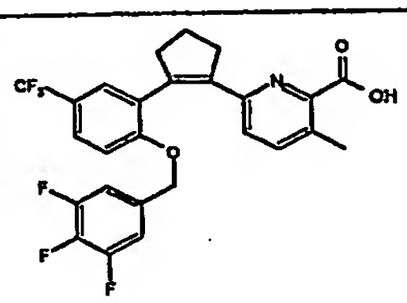
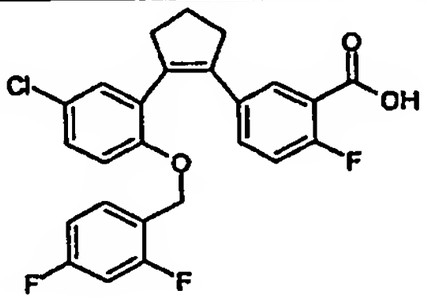
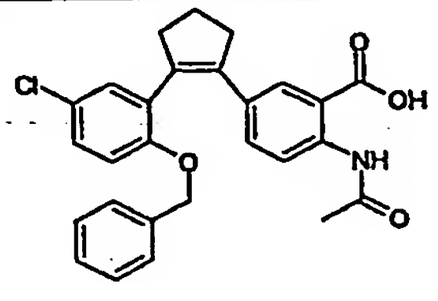
85		5-(2-{5-Chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-ethyl-3-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 1.27 (3H, t), 2.05-2.13 (2H, m), 2.86-2.95 (4H, m), 3.15 (2H, q), 4.94 (2H; s), 6.84 (1H, d), 7.05 (1H, d), 7.14-7.19 (2H, m), 7.27-7.32 (4H, m), 8.00 (1H, d), 8.41 (1H, d). LC/MS: Rt = 3.95 min, [M–H] 432, 434.
86		5-[2-(5-Chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 1.27 (3H, t), 2.05-2.12 (2H, m), 2.84-2.88 (2H, m), 2.90-2.94 (2H, m), 3.15 (2H, q), 4.87 (2H, s), 6.83 (1H, d), 6.96-7.00 (2H, m), 7.07 (1H, d), 7.11-7.17 (3H, m), 7.99 (1H, d), 8.39 (1H, d). LC/MS: Rt = 3.99 min, [M–H] 450, 452.
87		5-[2-(5-Chloro-2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 1.27 (3H, t), 2.06-2.13 (2H, m), 2.84-2.88 (2H, m), 2.91-2.95 (2H, m), 3.15 (2H, q), 4.87 (2H, s), 6.81 (1H, d), 7.08-7.10 (2H, m), 7.15 (1H, dd), 7.26-7.28 (3H, m), 7.99 (1H, d), 8.39 (1H, d). LC/MS: Rt = 4.24 min, [M–H] 466, 468.
88		5-{2-[5-Chloro-2-({[4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-ethyl-3-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 1.25 (3H, t), 2.07-2.14 (2H, m), 2.86-2.89 (2H, m), 2.92-2.95 (2H, m), 3.12 (2H, q), 4.96 (2H, s), 6.81 (1H, d), 7.10 (1H, d), 7.16 (1H, dd), 7.26-7.29 (2H, m), 7.55-7.57 (2H, m), 7.97 (1H, d), 8.39 (1H, d). LC/MS: Rt = 4.28 min, [M–H] 500, 502.

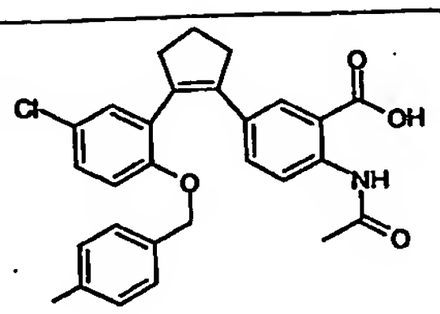
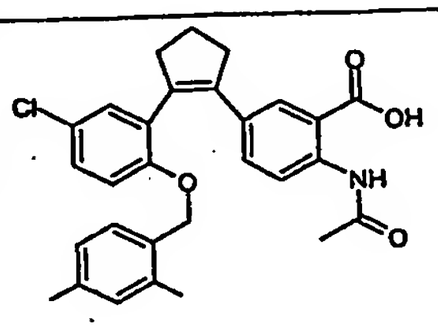
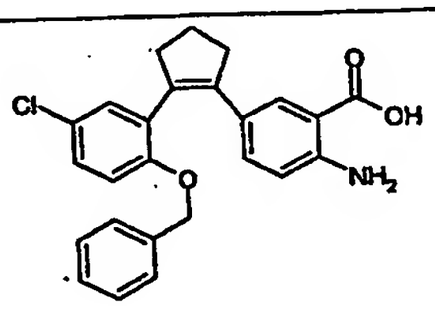
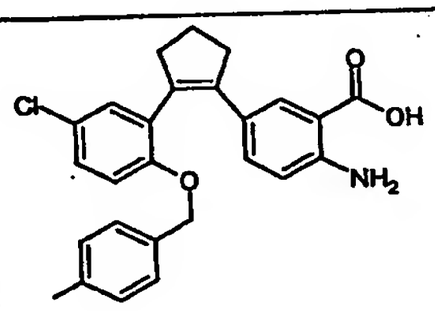
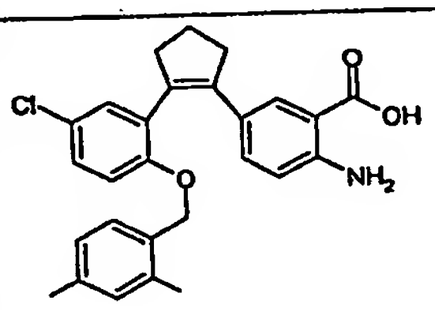
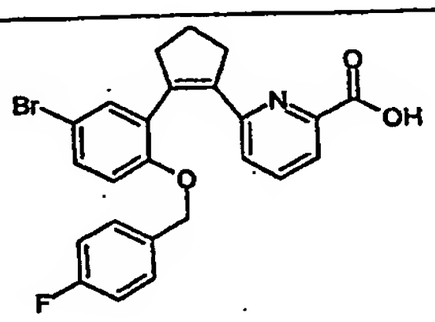
89		5-[2-(5-Chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ:1.13 (3H, t), 1.90-1.97 (2H, m), 2.70-2.80 (2H, m), 2.97-3.02 (2H, m)4.97 (2H, s), 6.81 (1H, d), 6.93 (1H, d), 6.96-7.03 (2H, m), 7.08 (1H, dd), 7.16-7.21 (2H, m), 7.24 (1H, d), 8.23 (1H, d). LC/MS: Rt = 3.98 min, [M–H] 450, 452.
90		5-[2-(5-Chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 1.26 (3H, t), 2.05-2.12 (2H, m), 2.82-2.86 (2H, m), 2.90-2.94 (2H, m), 3.14 (2H, q), 4.93 (2H, s), 6.75-6.82 (2H, m), 6.87 (1H, d), 7.07 (1H, d), 7.11-7.15 (1H, m), 7.18 (1H, dd), 7.97 (1H, d), 8.38 (1H, d). LC/MS: Rt = 4.01 min, [M–H] 468, 470.
91		5-[2-(5-Chloro-2-{[(2,6-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 1.28 (3H, t), 1.99-2.06 (2H, m), 2.76-2.80 (2H, m), 2.84-2.88 (2H, m), 3.16 (2H, q), 5.02 (2H, s), 6.83-6.87 (2H, m), 6.99-7.01 (2H, m), 7.20 (1H, dd), 7.24-7.28 (1H, m), 7.95 (1H, d), 8.34 (1H, d). LC/MS: Rt = 3.90 min, [M–H] 468, 470.
92		5-[2-(5-Chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 1.25 (3H, t), 2.07-2.14 (2H, m), 2.85-2.89 (2H, m), 2.93-2.96 (2H, m), 3.14 (2H, q), 4.95 (2H, s), 6.85 (1H, d), 6.90-6.94 (1H, m), 7.07-7.10 (2H, m), 7.17-7.21 (2H, m), 7.99 (1H, d), 8.40 (1H, d). LC/MS: Rt = 4.30 min, [M–H] 484, 486.

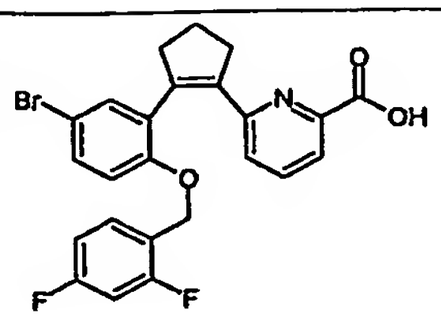
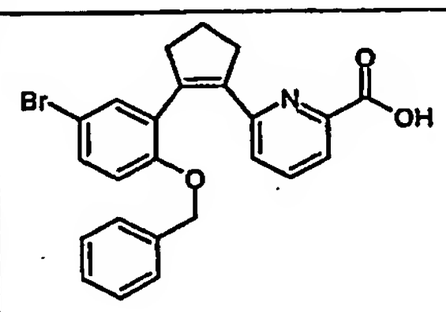
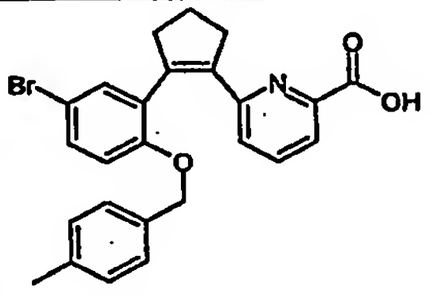
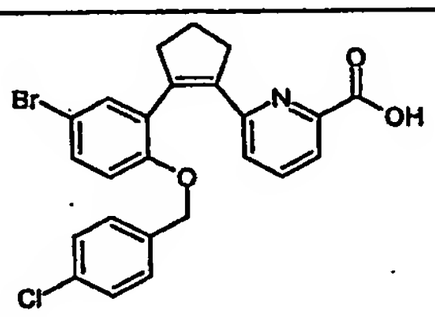
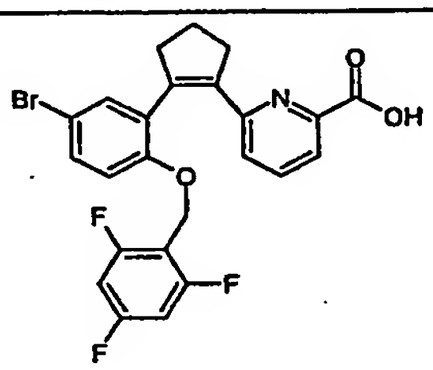
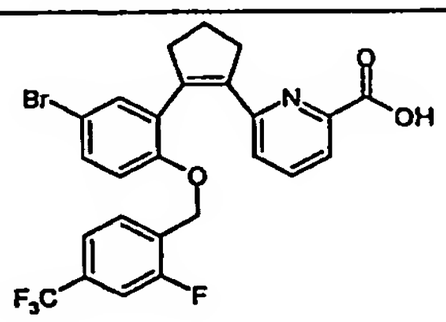
93		5-[2-(5-Chloro-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 1.25 (3H, t), 2.08-2.16 (2H, m), 2.84-2.88 (2H, m), 2.94-2.98 (2H, m), 3.14 (2H, q), 4.90 (2H, s), 6.84-6.92 (2H, m), 6.99-7.05 (1H, m), 7.11 (1H, d), 7.19 (1H, dd,), 7.99 (1H, d), 8.39 (1H, d). LC/MS: Rt = 4.13 min, [M–H] 486, 488.
94		5-[2-(5-Chloro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-ethyl-3-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 1.28 (3H, t), 2.00-2.07 (2H, m), 2.76-2.80 (2H, m), 2.85-2.89 (2H, m), 3.16 (2H, q), 4.95 (2H, s), 6.60-6.64 (2H, m), 6.97 (1H, d), 7.03 (1H, d), 7.20 (1H, dd), 7.95 (1H, d), 8.35 (1H, d). LC/MS: Rt = 3.98 min, [M–H] 486, 488.
95		3-Methyl-6-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.10-2.17 (2H, m), 2.65 (3H, s), 2.91-2.95 (2H, m), 3.00-3.05 (2H, m), 5.00 (2H, s), 7.03 (1H, d), 7.11-7.16 (3H, m), 2.27-2.28 (3H, m), 7.38 (1H, d), 7.44 (1H, d), 7.53 (1H, dd), 1075-11.23 (1H, br s). LC/MS: Rt = 4.10 min, [M–H] 452, 454.
96		6-{2-[2-{[(4-Fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.09-2.16 (2H, m), 2.66 (3H, s), 2.89-2.93 (2H, m), 2.99-3.03 (2H, m), 4.97 (2H, s), 6.94-6.98 (2H, m), 7.03 (1H, d), 7.09-7.13 (2H, m), 7.15 (1H, d), 7.37 (1H, d), 7.46 (1H, d), 7.54 (1H, dd), 10.42-11.20 (1H, br s). LC/MS: Rt = 4.06 min, [M–H] 470, 472.

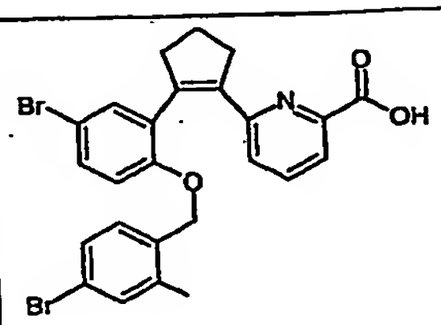
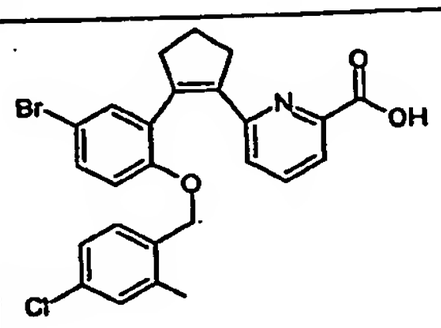
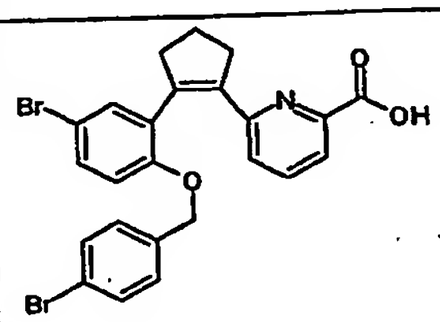
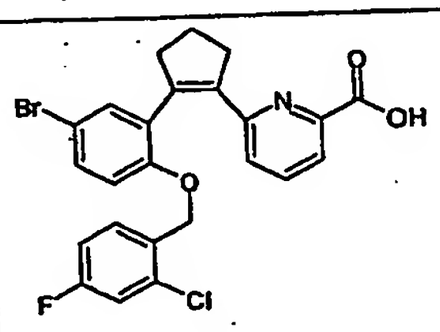
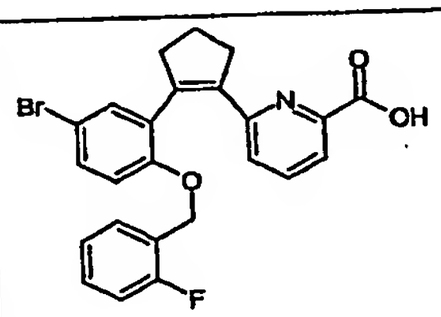
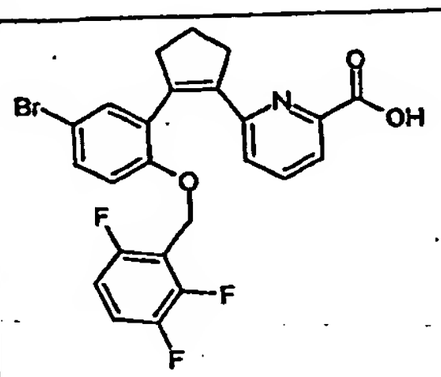
97		6-{2-[2-{[(4-Chlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.10-2.17 (2H, m), 2.66 (3H, s), 2.90-2.93 (2H, m), 3.00-3.04 (2H, m), 4.97 (2H, s), 7.02 (1H, d), 7.07 (2H, d), 7.16 (1H, d), 7.23-7.25 (2H, m), 7.37 (1H, d), 7.46 (1H, d), 7.54 (1H, dd), 10.50-10.98 (1H, br s). LC/MS: Rt = 4.22 min, [M–H] 486, 488.
98		6-{2-[2-{[(2-Fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.09-2.16 (2H, m), 2.65 (3H, s), 2.90-2.94 (2H, m), 3.00-3.04 (2H, m), 5.05 (2H, s), 6.97-7.04 (2H, m), 7.07-7.09 (2H, m), 7.13 (1H, d), 7.25-7.28 (1H, m), 7.39 (1H, d), 7.43 (1H, d), 7.56 (1H, dd), 10.75-11.09 (1H, br, s). LC/MS: Rt = 4.07 min, [M–H] 470, 472.
99		6-{2-[2-{[(2,4-Difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.08-2.16 (2H, m), 2.66 (3H, s), 2.88-2.91 (2H, m), 2.98-3.03 (2H, m), 5.01 (2H, s), 6.74-6.79 (2H, m), 7.07-7.11 (2H, m), 7.14 (1H, d), 7.38 (1H, d), 7.46 (1H, d), 7.57 (1H, dd), 10.59-11.05 (1H, br s). LC/MS: Rt = 4.10 min, [M–H] 488, 490.

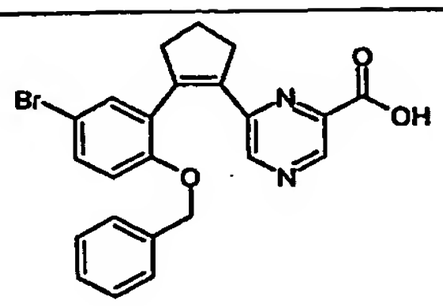
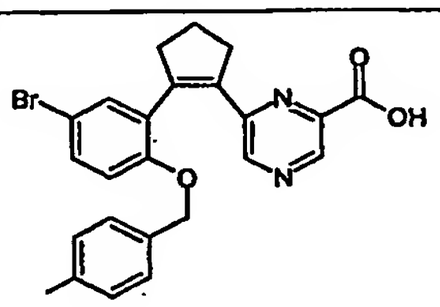
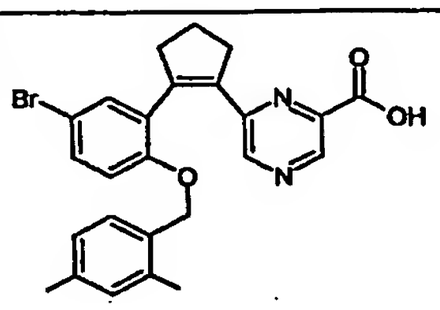
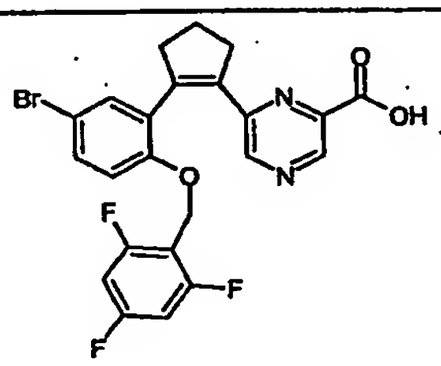
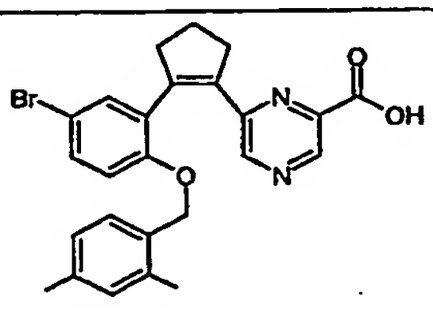
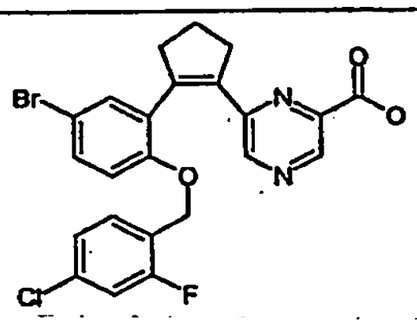
100		6-{2-[2-{[(2-Chloro-4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.10-2.18 (2H, m), 2.65 (3H, s), 2.90-2.94 (2H, m), 3.01-3.05 (2H, m), 5.04 (2H, s), 6.87-6.91 (1H, m), 7.05-7.09 (2H, m), 7.14-7.18 (2H, m), 7.39 (1H, d), 7.46 (1H, d), 7.57 (1H, dd), 10.56-11.02 (1H, br s). LC/MS: Rt = 4.27 min, [M–H] 504, 506.
101		6-{2-[2-{[(2,6-Difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.03-2.10 (2H, m), 2.65 (3H, s), 2.83-2.87 (2H, m), 2.93-2.97 (2H, m), 5.05 (2H, s), 6.79-6.83 (2H, m), 7.08 (1H, d), 7.17 (1H, d), 7.24-7.28 (1H, m), 7.37 (1H, d), 7.41 (1H, d), 7.58 (1H, dd). LC/MS: Rt = 4.03 min, [M–H] 488, 490.
102		6-{2-[2-{[(2,3-Difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.09-2.17 (2H, m), 2.65 (3H, s), 2.89-2.93 (2H, m), 3.00-3.04 (2H, m), 5.07 (2H, s), 6.88-6.89 (1H, m), 6.95-7.0 (1H, m), 7.06-7.10 (2H, m), 7.14 (1H, d), 7.40 (1H, d), 7.44 (1H, d), 7.57 (1H, dd), 10.61-10.99 (1H, br s). LC/MS: Rt = 4.10 min, [M–H] 488, 490.
103		6-{2-[2-{[(2-Chloro-6-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.01-2.09 (2H, m), 2.65 (3H, s), 2.83-2.87 (2H, m), 2.92-2.96 (2H, m), 5.11 (1H, d), 6.91-6.97 (1H, m), 7.07 (1H, d), 7.11 (1H, d), 7.19-7.24 (2H, m), 7.37-7.41 (2H, m), 7.59 (1H, dd). LC/MS: Rt = 4.14 min, [M–H] 504, 506.

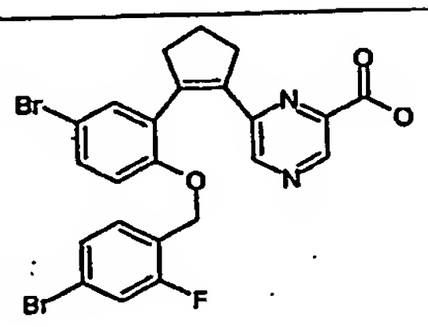
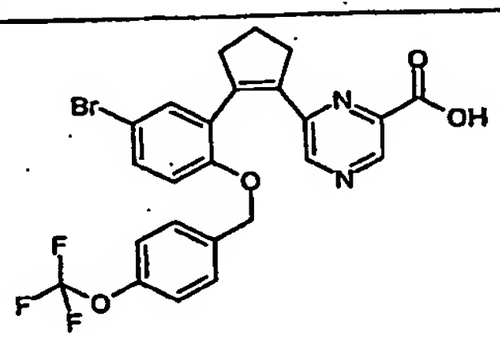
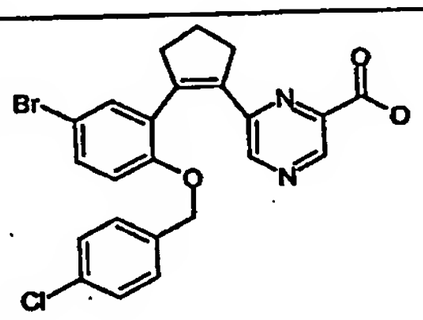
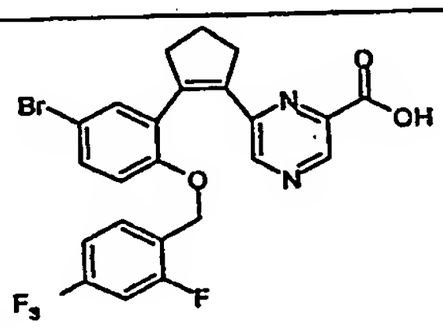
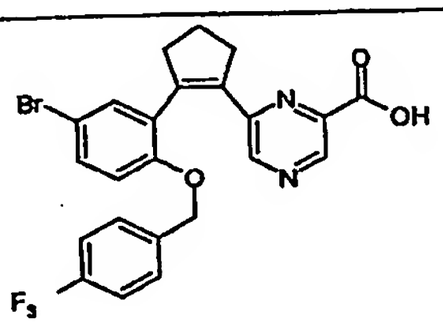
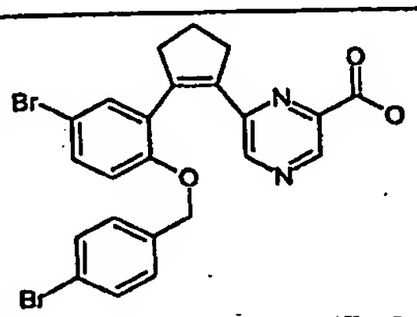
104		3-Methyl-6-[2-(5-(trifluoromethyl)-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.12-2.20 (2H, m), 2.65 (3H, s), 2.89-2.93 (2H, m), 3.02-3.06 (2H, m), 4.99 (2H, s), 6.86-6.93 (2H, m), 7.05 (1H, d), 7.19 (1H, d), 7.41 (1H, d), 7.49 (1H, d), 7.58 (1H, dd), 10.56-10.90 (1H, br s). LC/MS: Rt = 4.15 min, [M–H] 506, 508.
105		3-Methyl-6-[2-(5-(trifluoromethyl)-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.03-2.11 (2H, m), 2.66 (3H, s), 2.82-2.86 (2H, m), 2.93-2.98 (2H, m), 5.01 (2H, s), 6.56-6.60 (2H, m), 7.10 (1H, d), 7.17 (1H, d), 7.36 (1H, d), 7.44 (1H, d), 7.58 (1H, dd), 10.56-11.00 (1H, br s). LC/MS: Rt = 4.07 min, [M–H] 506, 508.
106		3-Methyl-6-[2-(5-(trifluoromethyl)-2-{[(3,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR ($CDCl_3$) δ: 2.13-2.21 (2H, m), 2.66 (3H, s), 2.90-2.94 (2H, m), 3.03-3.07 (2H, m), 4.93 (2H, s), 6.73-6.76 (2H, m), 6.97 (1H, d), 7.22 (1H, d), 7.42 (1H, d), 7.51 (1H, d), 7.56 (1H, dd), 10.53-10.80 (1H, br s). LC/MS: Rt = 4.18 min, [M–H] 506, 508.
107		5-[2-(5-Chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.00 min. [M+H] = 476
108		2-(Acetylamino)-5-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)benzoic acid	LC/MS: Rt = 4.05 min. [M+H] = 462

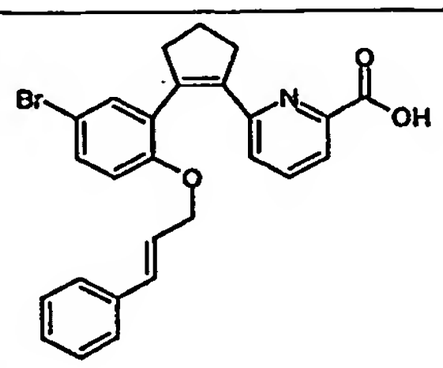
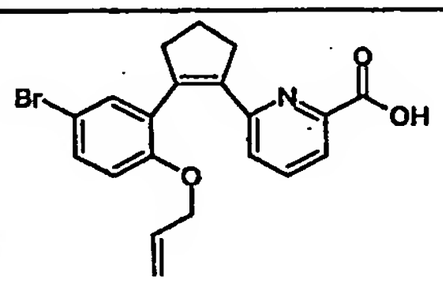
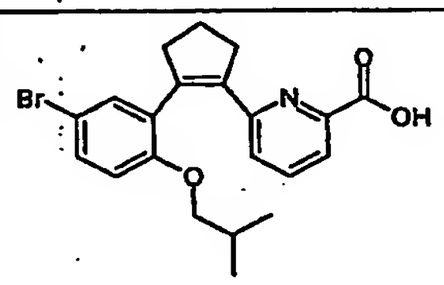
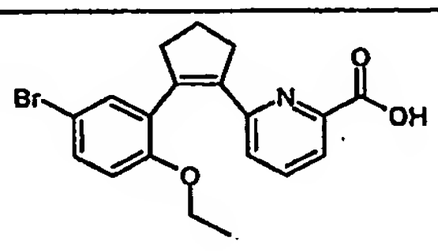
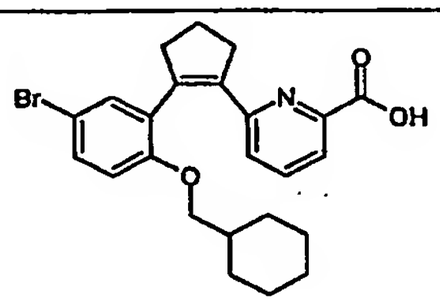
109		2-(Acetylamino)-5-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]benzoic acid	LC/MS: Rt = 4.04 min. [M+H] = 480
110		2-(Acetylamino)-5-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]benzoic acid	LC/MS: Rt = 4.06 min. [M+H] = 498
111		2-Amino-5-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)benzoic acid	LC/MS: Rt = 3.87 min. [M+H] = 420
112		2-Amino-5-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]benzoic acid	LC/MS: Rt = 3.87 min. [M+H] = 438
113		2-Amino-5-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]benzoic acid	LC/MS: Rt = 3.91 min. [M+H] = 456
114		6-[2-(5-Bromo-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS: Rt = 3.66 min. [M+H] = 468, 470

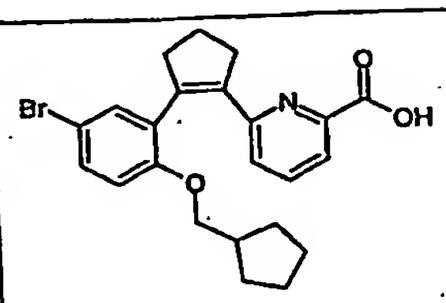
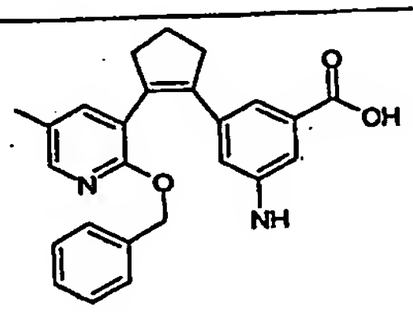
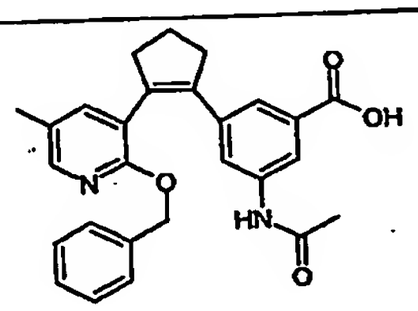
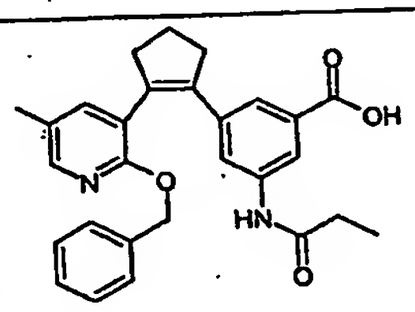
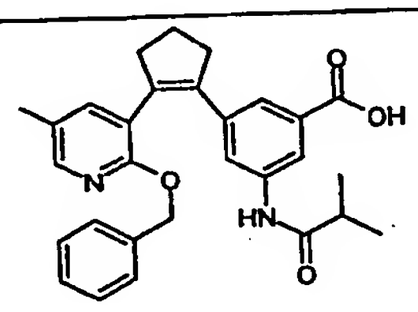
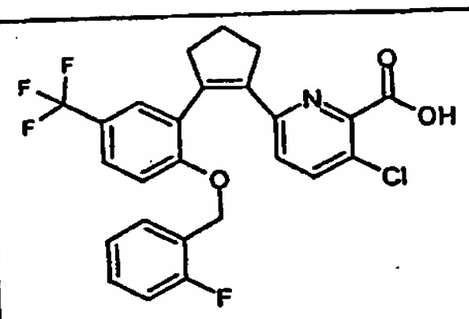
115		6-[2-(5-Bromo-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS: Rt = 3.69 min. [M+H] = 486,488
116		6-(2-{5-Bromo-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylic acid	LC/MS: Rt = 3.65 min. [M+H] = 450,452
117		6-[2-(5-Bromo-2-{[(4-methylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS: Rt = 4.10 min. [M+H] = 464, 466
118		6-[2-(5-Bromo-2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS: Rt = 4.20 min. [M+H] = 484, 486
119		6-[2-(5-Bromo-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS: Rt = 4.07 min. [M+H] = 504,506
120		6-{2-[5-Bromo-2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS: Rt = 4.36 min. [M+H] = 536,538

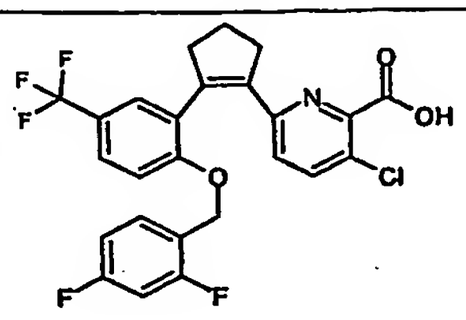
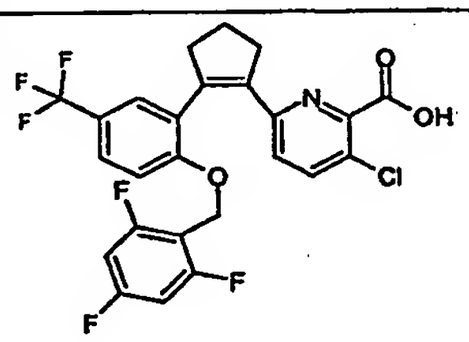
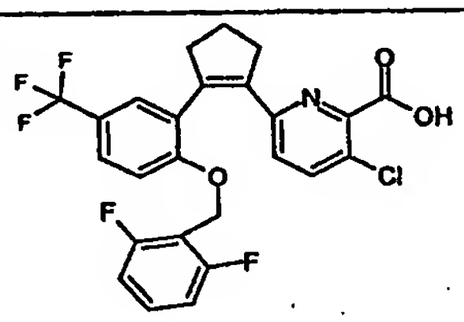
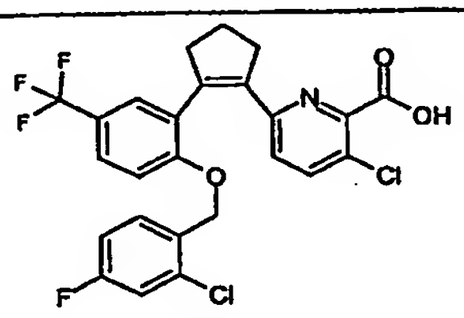
121		6-[2-(5-Bromo-2-{[(4-bromo-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS: Rt = 4.32 min. [M+H] = 546, 548, 550
122		6-[2-(5-Bromo-2-{[(4-chloro-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS: Rt = 4.25 min. [M+H] = 502,504
123		6-[2-(5-Bromo-2-{[(4-bromophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS: Rt = 4.26 min. [M+H] = 528, 530, 532
124		6-[2-(5-Bromo-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS: Rt = 4.35 min. [M+H] = 502,504
125		6-[2-(5-Bromo-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS: Rt = 4.08 min. [M+H] = 468,470
126		6-[2-(5-Bromo-2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS: Rt = 4.05 min. [M+H] = 504, 506

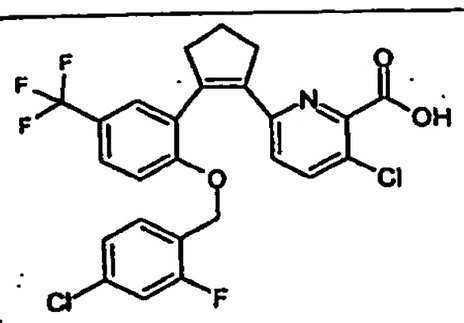
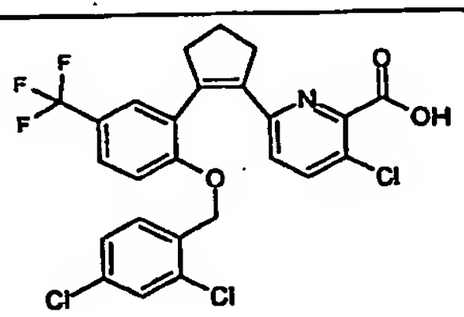
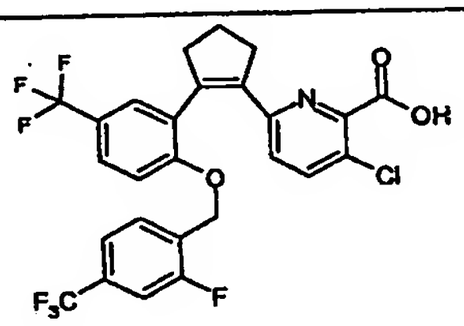
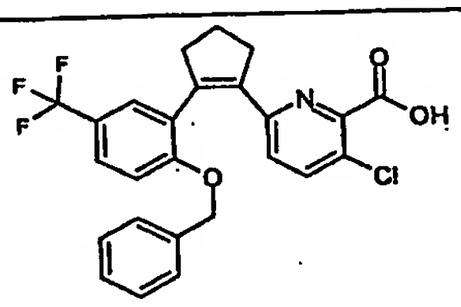
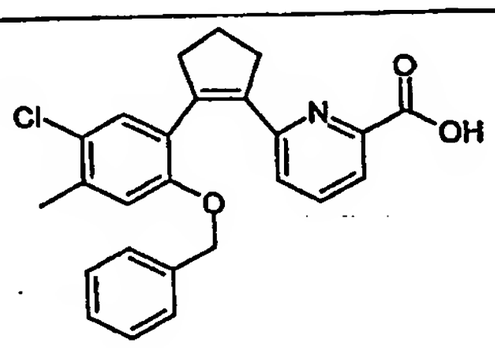
127		6-(2-{5-Bromo-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyrazinecarboxylic acid	LC/MS: Rt = 4.15 min. [M+H] = 451,453
128		6-[2-(5-Bromo-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	LC/MS: Rt = 4.54 min. [M+H] = 469,471
129		6-[2-(5-Bromo-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	LC/MS: Rt = 4.57 min. [M+H] = 487, 489
130		6-[2-(5-Bromo-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	LC/MS: Rt = 4.47 min. [M+H] = 505, 507
131		6-[2-(5-Bromo-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	LC/MS: Rt = 4.94 min. [M+H] = 503, 505
132		6-[2-(5-Bromo-2-{[(4-chloro-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	LC/MS: Rt = 4.87 min. [M+H] = 503, 505

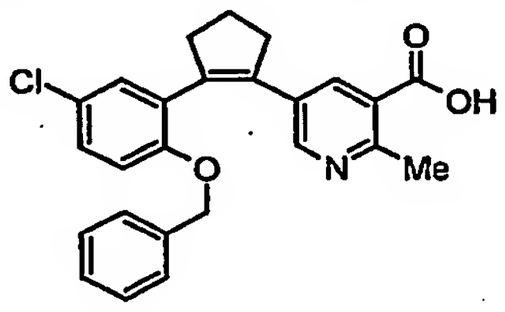
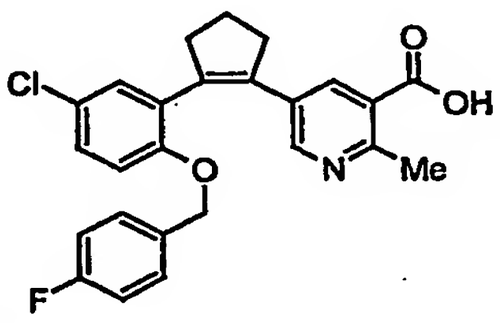
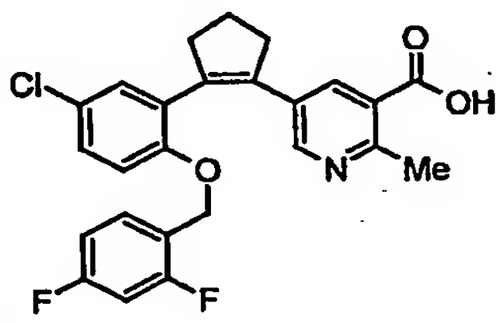
133		6-[2-(5-bromo-2-{[(4-bromo-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	LC/MS: Rt = 4.91 min. [M+H] = 547, 549, 551
134		6-(2-{5-Bromo-2-[({4-[(trifluoromethyl)oxy]phenyl}methyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyrazinecarboxylic acid	LC/MS: Rt = 4.67 min. [M+H] = 535,537
135		6-[2-(5-Bromo-2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	LC/MS: Rt = 4.77 min. [M+H] = 485, 487
136		6-{2-[5-Bromo-2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid	LC/MS: Rt = 4.69 min. [M+H] = 537, 539
137		6-{2-[5-Bromo-2-({[4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid	LC/MS: Rt = 4.64 min. [M+H] = 519, 521
138		6-[2-(5-bromo-2-{[(4-bromophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	LC/MS: Rt = 4.90 min. [M+H] = 529, 531, 533

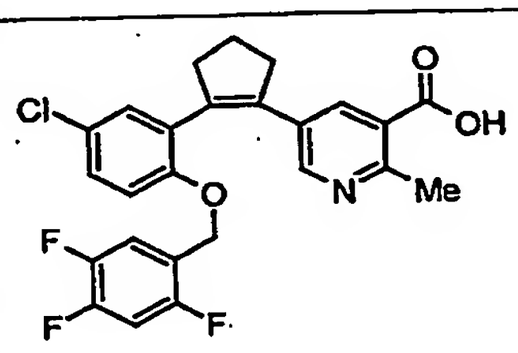
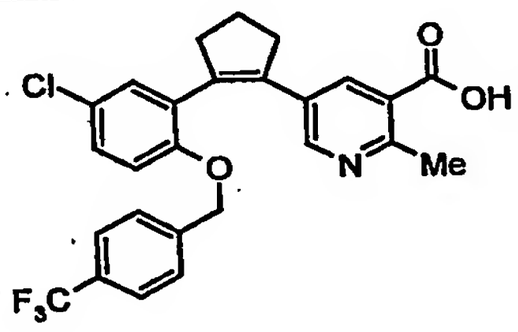
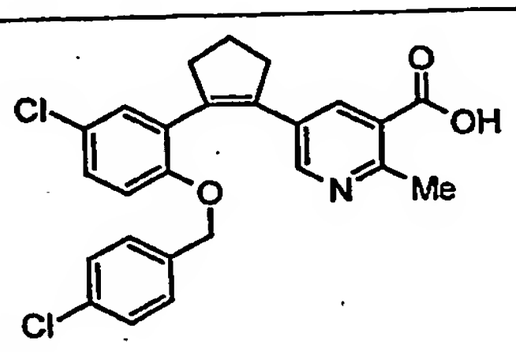
139		6-[2-(5-Bromo-2-{[(2*E*)-3-phenyl-2-propen-1-yl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ:2.00-2.05(2H, m), 2.67-3.02(4H, br m), 4.50(2H, s), 6.10-6.15(1H, m), 6.5-6.7(1H, m), 6.90-7.10(3H, m), 7.15-7.35(6H, m), 7.50-7.60(1H, m), 7.65-7.70(1H, m).
140		6-{2-[5-Bromo-2-(2-propen-1-yloxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	^{1}H NMR (DMSO) δ:1.98-2.04(2H, m), 2.70-2.75(2H, m), 2.95-3.05(2H, m), 4.40(2H, m), 5.10-5.21(2H,m), 5.73-5.76(1H, m), 6.94-6.97(1H, m), 7.05-7.15(2H, m), 7.20-7.25(1H, m), 7.60-7.80(2H,m).
141		6-(2-{5-Bromo-2-[(2-methylpropyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylic acid	LC/MS: Rt = 3.95 min. [M+H] = 416, 418
142		6-{2-[5-Bromo-2-(ethyloxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS: Rt = 3.44 min. [M+H] = 388, 390
143		6-(2-{5-Bromo-2-[(cyclohexylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylic acid	LC/MS: Rt = 4.41 min. [M+H] = 456, 458

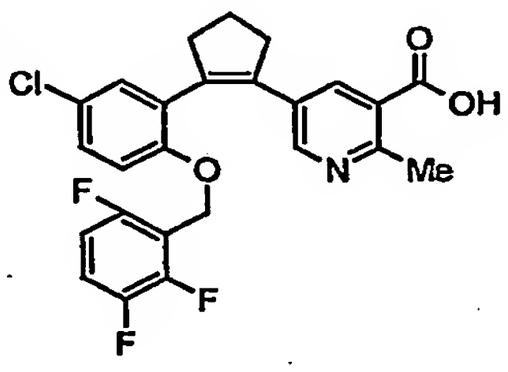
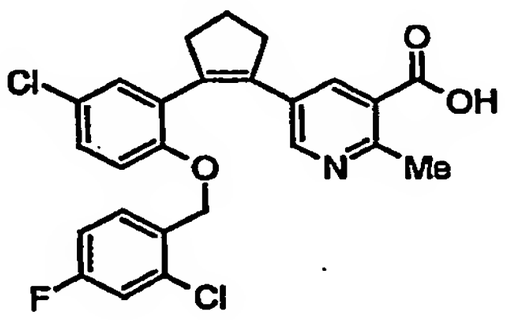
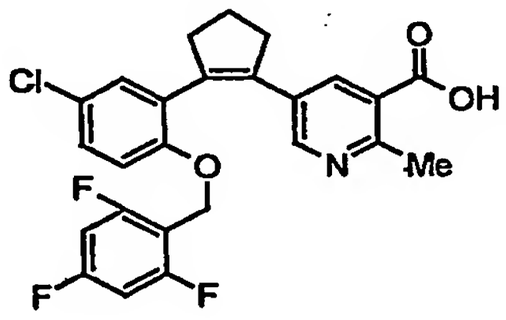
144		6-(2-{5-Bromo-2-[(cyclopentylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylic acid	LC/MS: Rt = 4.25 min. [M+H] = 442, 444
145		3-Amino-5-(2-{5-chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)benzoic acid	LC/MS: Rt = 3.74 min. [M+H] = 421
146		3-(Acetylamino)-5-(2-{5-chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)benzoic acid	LC/MS: Rt = 3.74 min. [M+H] = 463
147		3-(2-{5-Chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-5-(propanoylamino)benzoic acid	LC/MS: Rt = 3.90 min. [M+H] = 477
148		3-(2-{5-Chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-5-[(2-methylpropanoyl)amino]benzoic acid	LC/MS: Rt = 4.02 min. [M+H] = 491
149		3-Chloro-6-{2-[2-{[(2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS: Rt = 4.33 min. [M+H] = 492

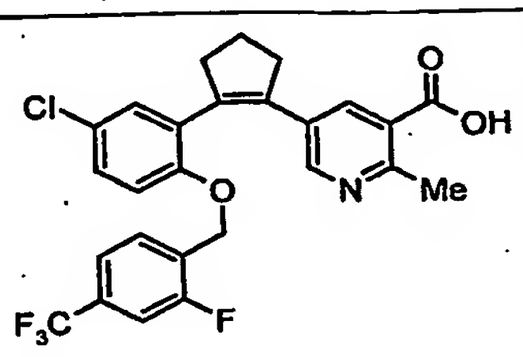
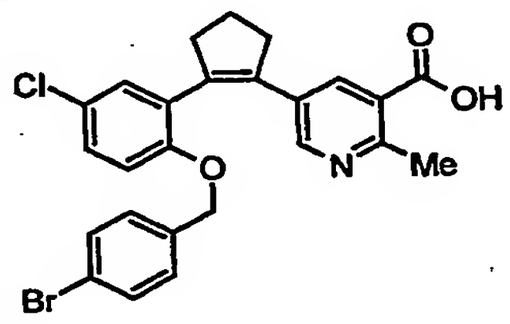
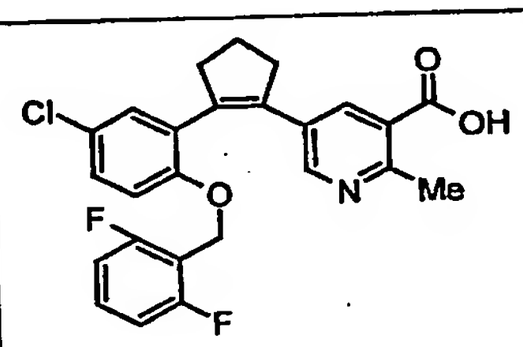
150		3-Chloro-6-{2-[2-{[(2,4-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS: Rt = 4.34 min. [M+H] = 510
151		3-Chloro-6-[2-(5-(trifluoromethyl)-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	LC/MS: Rt = 4.30 min. [M+H] = 528
152		3-Chloro-6-{2-[2-{[(2,6-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS: Rt = 4.31 min. [M+H] = 510
153		3-Chloro-6-{2-[2-{[(2-chloro-4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS: Rt = 4.54 min. [M+H] = 526

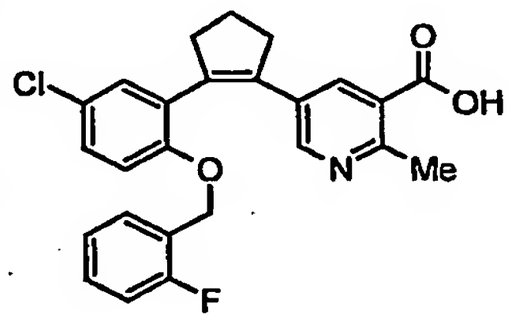
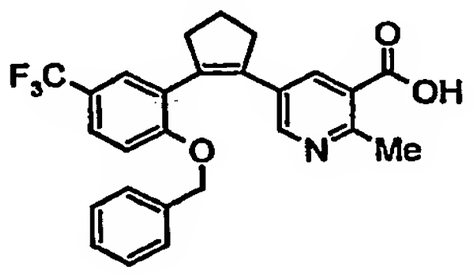
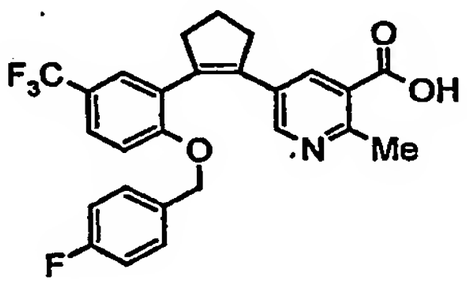
154		3-Chloro-6-{2-[2-{[(4-chloro-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS: Rt = 4.55 min. [M+H] = 526
155		3-Chloro-6-{2-[2-{[(2,4-dichlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS: Rt = 4.77 min. [M+H] = 542, 544
156		3-Chloro-6-{2-[2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS: Rt = 4.41 min. [M+H] = 560
157		3-Chloro-6-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	LC/MS: Rt = 4.31 min. [M+H] = 474
158		6-(2-{5-Chloro-4-methyl-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylic acid	LC/MS: Rt = 3.89 min. [M+H] = 420

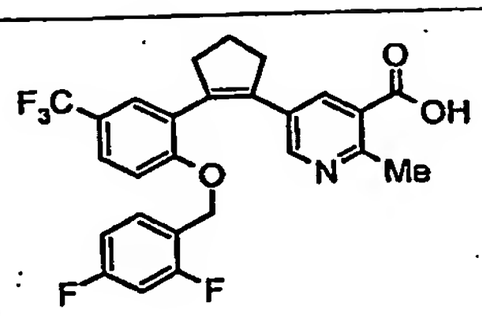
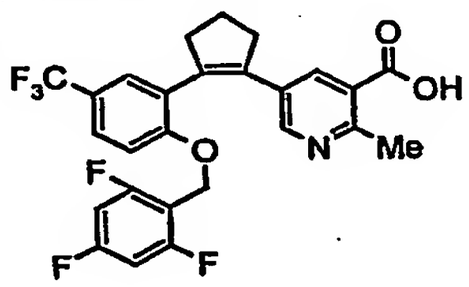
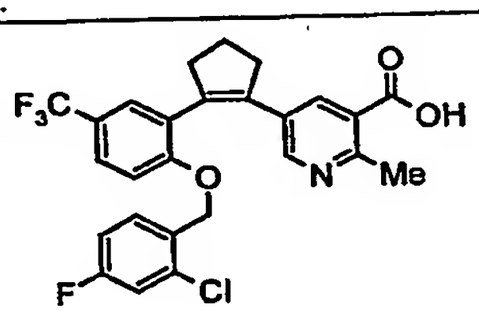
159		5-(2-{5-Chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.98-2.05 (2H, m), 2.62 (3H, s), 2.79-2.83 (2H, m), 2.87-2.90 (2H, m), 5.03 (2H, s), 7.09-7.33 (8H, m), 7.84 (1H, d), 8.21 (1H, d), 13.1 (1H,s) LC/MS: Rt=3.81 [MH+] 420.4, 422.4
160		5-[2-(5-Chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.99-2.06 (2H, m), 2.62 (3H, s), 2.78-2.82 (2H, m), 2.86-2.90 (2H, m), 5.00 (2H, s), 7.10-7.14 (4H, m), 7.20-7.23 (2H, m), 7.31 (1H, dd), 7.81 (1H, d), 8.19 (1H, d), 13.1 (1H,s) LC/MS: Rt=3.85 [MH+] 438.4, 440.4
161		5-[2-(5-Chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.94-2.02 (2H, m), 2.61 (3H, s), 2.74-2.78 (2H, m), 2.83-2.87 (2H, m), 5.01 (2H, s), 7.02 (1H, dt) 7.10 (1H,d), 7.18-7.35 (4H, m), 7.77 (1H, d), 8.14 (1H, d), 13.1 (1H,s) LC/MS: Rt=3.89 [MH+] 456.3, 458.3

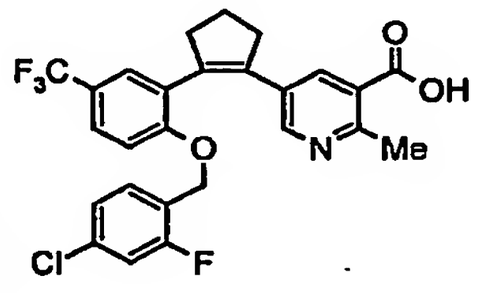
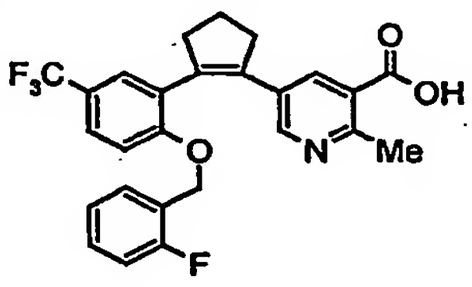
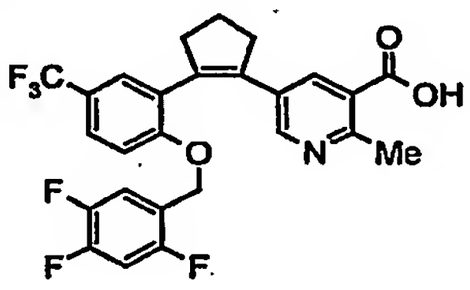
162		5-[2-(5-Chloro-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.96-2.02 (2H, m), 2.60 (3H, s), 2.77-2.80 (2H, m), 2.85-2.88 (2H, m), 4.98 (2H, s), 7.16 (1H, d), 7.21 (1H, d)7.21-7.26 (1H, m), 7.35 (1H, dd), 7.47-7.53 (1H, m), 7.75 (1H, d), 8.12 (1H, d), 13.0 (1H,s) LC/MS: Rt=3.86 [MH+] 474.4, 476.4
163		5-{2-[5-Chloro-2-({[4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.99-2.06 (2H, m), 2.60 (3H, s), 2.81-2.85 (2H, m), 2.89-2.93 (2H, m), 5.13 (2H, s), 7.10 (1H, d), 7.14 (1H, d), 7.31-7.38 (3H, m), 7.83 (2H, d), 7.83 (1H, d), 8.21 (1H, d), 13.1 (1H,s) LC/MS: Rt=4.02 [MH+] 488.4, 490.4
164		5-[2-(5-Chloro-2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.96-2.04 (2H, m), 2.62 (3H, s), 2.79-2.82 (2H, m), 2.87-2.91 (2H, m), 5.01 (2H, s), 7.08-7.11 (2H, m), 7.18 (2H, d), 7.29-7.37 (3H, m), 7.82 (1H, d), 8.19 (1H, d), 13.1 (1H,s) LC/MS: Rt=4.02 [MH+] 454.4

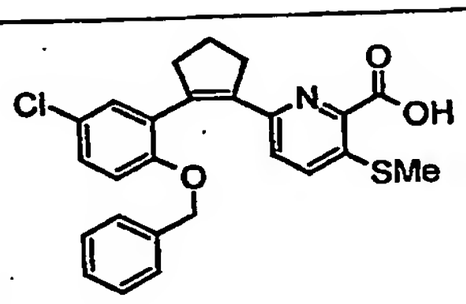
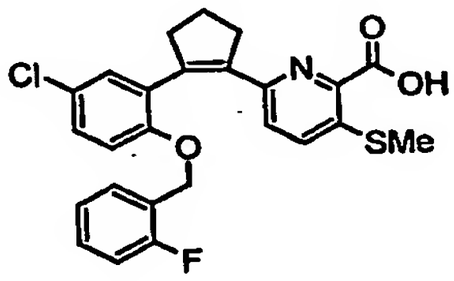
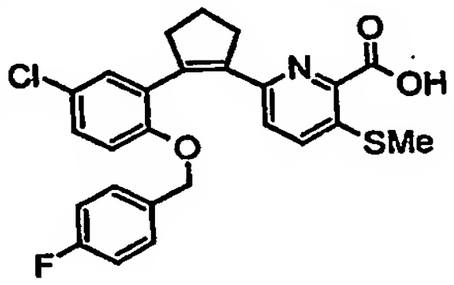
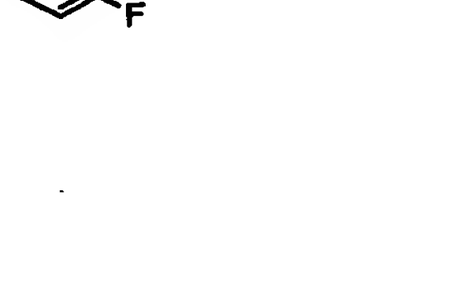
165		5-[2-(5-Chloro-2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.91-2.01 (2H, m), 2.61 (3H, s), 2.68-2.72 (2H, m), 2.87-2.91 (2H, m), 5.06 (2H, s), 7.07-7.12 (2H, m), 7.27 (1H, d), 7.37 (1H, dd), 7.44-7.53 (1H, m), 7.71 (1H, d), 8.07 (1H, d), 13.1 (1H,s) LC/MS: Rt=3.68 [MH+] 474.6, 476.4
166		5-[2-(5-chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.96-2.03 (2H, m), 2.60 (3H, s), 2.77-2.80 (2H, m), 2.85-2.89 (2H, m), 5.01 (2H, s), 7.12-7.20 (3H, m), 7.31-7.35 (2H, m), 7.42 (1H, dd), 7.77 (1H, d), 8.14 (1H, d), 13.1 (1H,s) LC/MS: Rt=4.05 [MH+] 472.4
167		5-[2-(5-Chloro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.90-1.97 (2H, m), 2.61 (3H, s), 2.68-2.72 (2H, m), 2.79-2.82 (2H, m), 4.99 (2H, s), 7.09-7.17 (3H, m), 7.26 (1H, d), 7.36 (1H, dd), 7.71 (1H, d), 8.07 (1H, d), 13.1 (1H,s) LC/MS: Rt=3.72 [MH+] 474.4, 476.4

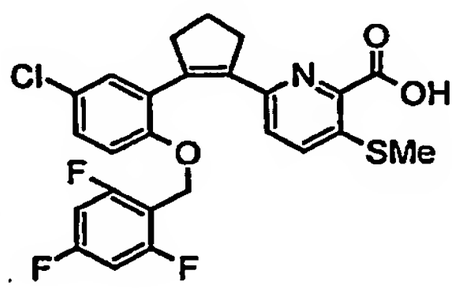
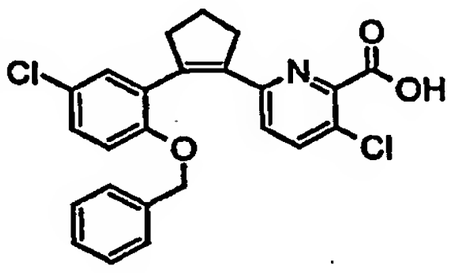
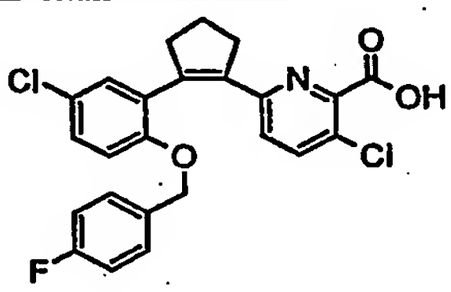
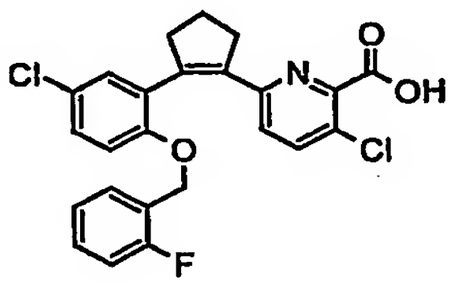
168		5-{2-[5-Chloro-2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.97-2.05 (2H, m), 2.59 (3H, s), 2.78-2.81 (2H, m), 2.87-2.91 (2H, m), 5.14 (2H, s), 7.15 (1H, d), 7.20 (1H, d), 7.34 (1H, dd), 7.42 (1H, t), 7.53 (1H, d), 7.65 (1H, d), 7.78 (1H, d), 8.15 (1H, d), 13.1 (1H,s) LC/MS: Rt=4.05 [MH+] 506.5, 508.4
169		5-[2-(5-Chloro-2-{[(4-bromophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.97-2.05 (2H, m), 2.62 (3H, s), 2.79-2.82 (2H, m), 2.87-2.91 (2H, m), 5.00 (2H, s), 7.08-7.13 (4H, m), 7.31 (1H, dd), 7.49 (2H, d), 7.82 (1H, d), 8.19 (1H, d), 13.1 (1H,s) LC/MS: Rt=4.09 [MH+] 500.3, 502.3
170		5-[2-(5-Chloro-2-{[(2,6-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.88-1.96 (2H, m), 2.62 (3H, s), 2.66-2.70 (2H, m), 2.78-2.81 (2H, m), 5.05 (2H, s), 7.05-7.11 (3H, m), 7.26 (1H, d), 7.35 (1H, dd), 7.41-7.48 (1H, m), 7.74 (1H, d), 8.09 (1H, d), 13.1 (1H,s) LC/MS: Rt=3.63 [MH+] 456.5, 458.4

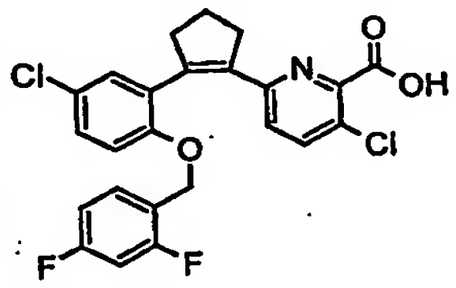
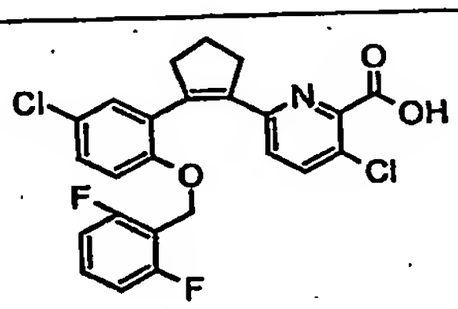
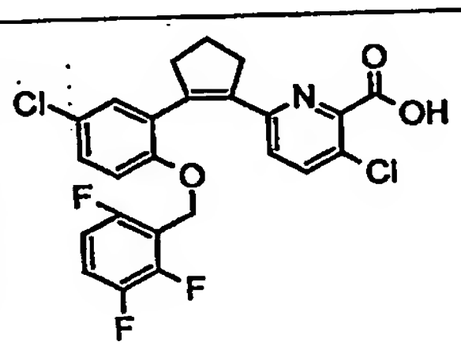
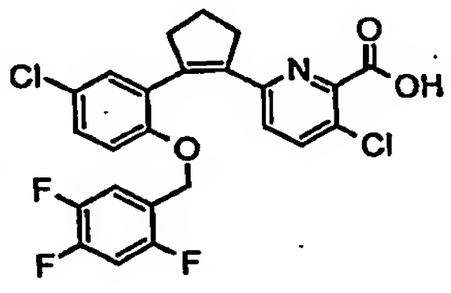
171		5-[2-(5-Chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.95-2.02 (2H, m), 2.61 (3H, s), 2.75-2.79 (2H, m), 2.84-2.88 (2H, m), 5.07 (2H, s), 7.08-7.24 (5H, m), 7.31-7.37 (2H, m), 7.80 (1H, d), 8.16 (1H, d), 13.1 (1H,s) LC/MS: Rt=3.73 [MH+] 438.5, 440.4
172		2-Methyl-5-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.99-2.08 (2H, m), 2.61 (3H, s), 2.83-2.87 (2H, m), 2.89-2.92 (2H, m), 5.14 (2H, s), 7.19-7.21 (2H, m), 7.26-7.34 (4H, m), 7.37 (1H, d), 7.63 (1H, dd), 7.82 (1H, d), 8.20 (1H, d), 13.0 (1H,s) LC/MS: Rt=3.72 [MH+] 454.4
173		5-{2-[2-{[(4-Fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.99-2.07 (2H, m), 2.61 (3H, s), 2.82-2.86 (2H, m), 2.88-2.91 (2H, m), 5.10 (2H, s), 7.11-7.16 (2H, m), 7.22-7.30 (3H, m), 7.38 (1H, d), 7.64 (1H, dd), 7.79 (1H, d), 8.18 (1H, d), 13.0 (1H,s) LC/MS: Rt=3.74 [MH+] 472.4

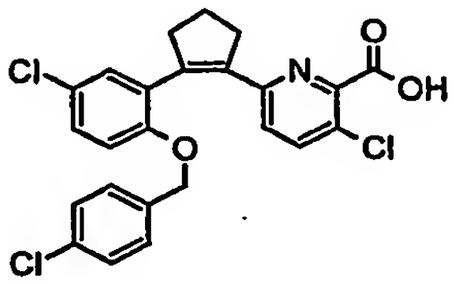
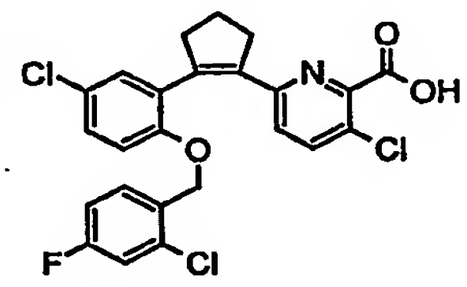
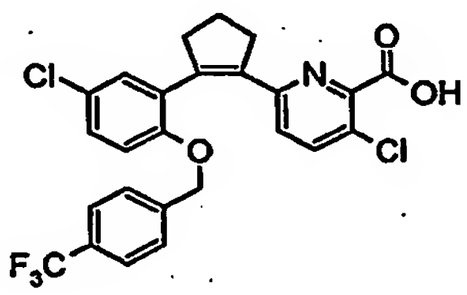
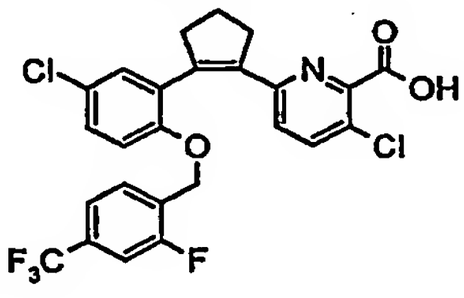
174		5-{2-[2-{[(2,4-Difluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.96-2.03 (2H, m), 2.60 (3H, s), 2.78-2.82(2H, m), 2.85-2.89 (2H, m), 5.12 (2H, s), 7.04 (1H, dt), 7.22 (1H, dt), 7.32-7.38 (3H, m), 7.65 (1H, dd), 7.74 (1H, d), 8.13 (1H, d), 13.1 (1H,s) LC/MS: Rt=3.78 [MH+] 490.4
175		5-{2-[2-{[(2,4,6-Trifluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.92-1.99 (2H, m), 2.61 (3H, s), 2.72-2.76(2H, m), 2.80-2.84 (2H, m), 5.09 (2H, s), 7.14-7.19 (2H, m), 7.37 (1H, d), 7.43 (1H, d), 7.67-7.69 (2H, m), 8.07 (1H, d), 13.1 (1H,s) LC/MS: Rt=3.74 [MH+] 508.4
176		5-{2-[2-{[(2-Chloro-4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.97-2.04 (2H, m), 2.59 (3H, s), 2.80-2.84(2H, m), 2.87-2.90 (2H, m), 5.12 (2H, s), 7.19 (1H, dt), 7.35-7.40 (3H, m), 7.45 (1H, dd), 7.66 (1H, dd), 7.75 (1H, d), 8.14 (1H, d), 13.1 (1H,s) LC/MS: Rt=4.00 [MH+] 506.4, 508.4

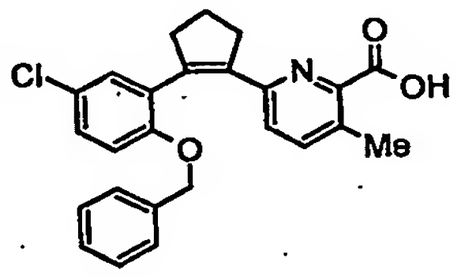
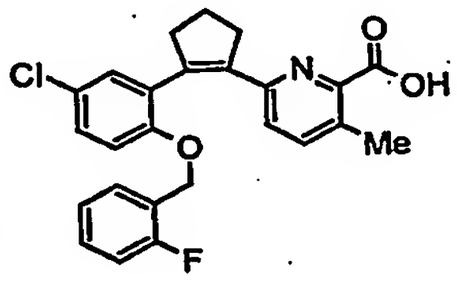
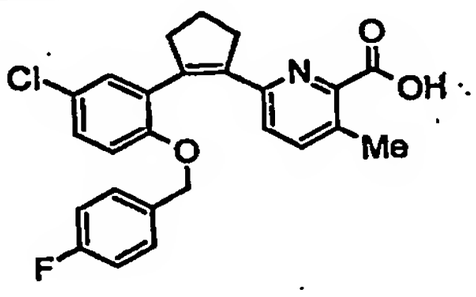
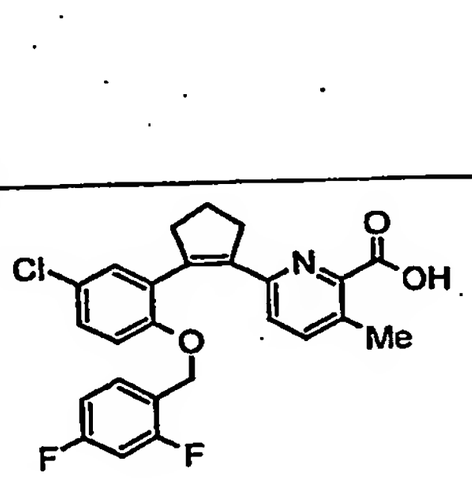
177		5-{2-[2-{[(4-Chloro-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.97-2.04 (2H, m), 2.60 (3H, s), 2.79-2.82(2H, m), 2.86-2.90 (2H, m), 5.14 (2H, s), 7.23-7.43 (5H, m), 7.66 (1H, dd), 7.75 (1H, d), 8.14 (1H, d), 13.1 (1H, br s) LC/MS: Rt=3.99 [MH+] 506.4, 508.4
178		5-{2-[2-{[(2-Fluorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-methyl-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.97-2.04 (2H, m), 2.61 (3H, s), 2.79-2.83(2H, m), 2.86-2.90 (2H, m), 5.18 (2H, s), 7.13-7.27 (3H, m), 7.35-7.39 (3H, m), 7.65 (1H, dd), 7.78 (1H, d), 8.16 (1H, d), 13.1 (1H, br s) LC/MS: Rt=3.84 [MH+] 472.5
179		2-Methyl-5-[2-(5-(trifluoromethyl)-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.98-2.05 (2H, m), 2.59 (3H, s), 2.80-2.84(2H, m), 2.87-2.90 (2H, m), 5.09 (2H, s), 7.28-7.31 (1H, dt, m), 7.37 (1H, d), 7.43 (1H, d), 7.51-7.54 (1H, m), 7.67 (1H, dd), 7.73 (1H, d), 8.12 (1H, d), 13.1 (1H,s) LC/MS: Rt=3.95 [MH+] 508.4

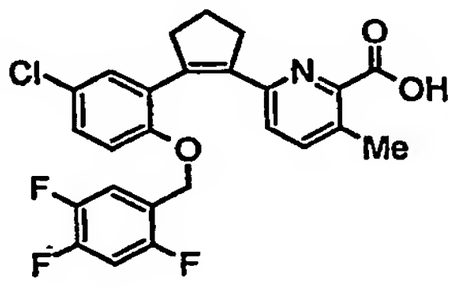
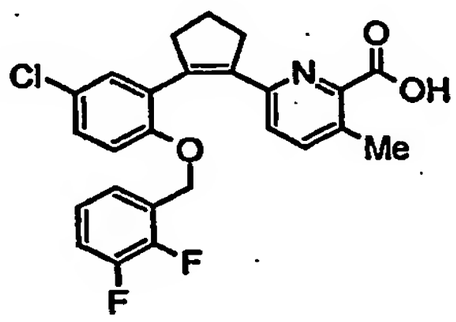
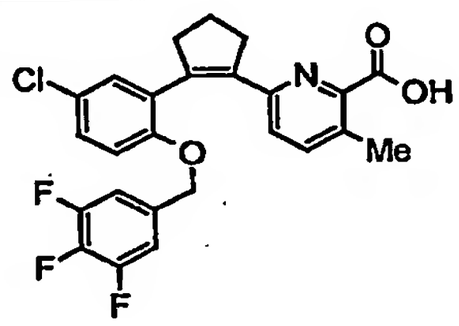
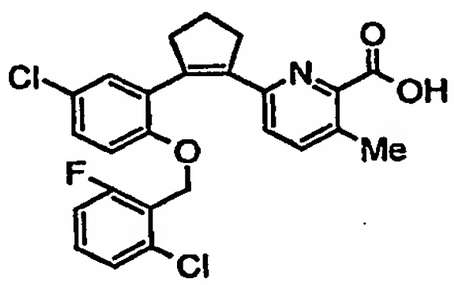
180		6-(2-{5-Chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-3-(methylthio)-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.95-2.02 (2H, m), 2.36 (3H, s), 2.82-2.85 (2H, m), 2.97-3.01 (2H, m), 5.02 (2H, s), 7.03 (1H, d), 7.11-7.16 (4H, m), 7.25-7.33 (4H, m), 7.60 (1H, d), 12.6 (1H,s) LC/MS: Rt=4.08 [MH+] 452.4, 454.4
181		6-[2-(5-Chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-(methylthio)-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.92-2.00 (2H, m), 2.35 (3H, s), 2.78-2.82(2H, m), 2.95-2.99 (2H, m), 5.07 (2H, s), 7.00 (1H, d), 7.09-7.21 (4H, m), 7.32-7.37 (2H, m), 7.58 (1H, d), 7.79 (1H, d), 12.5 (1H,s) LC/MS: Rt=4.08 [MH+] 470.4, 472.4
182		6-[2-(5-Chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-(methylthio)-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.92-2.00 (2H, m), 2.19 (3H, s), 2.74-2.80(2H, m), 2.85-2.92 (2H, m), 5.08 (2H, s), 6.65 (1H, d), 7.08 (1H, d), 7.18-7.23 (4H, m), 7.25-7.41 (3H, m). LC/MS: Rt=4.05 [MH+] 470.4, 472.4
183		6-[2-(5-Chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-(methylthio)-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.92-1.99 (2H, m), 2.35 (3H, s), 2.77-2.81(2H, m), 2.94-2.98 (2H, m), 5.02 (2H, s), 6.96-7.01 (2H, m), 7.15-7.24 (4H, m), 7.34 (1H, dd), 7.57 (1H, d), 7.79 (1H, d), 12.5 (1H,s) LC/MS: Rt=4.09 [MH+] 488.4, 490.4

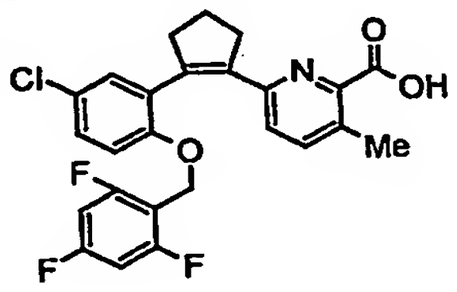
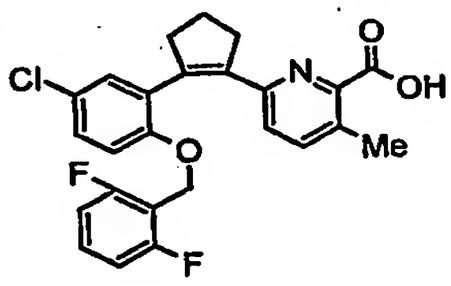
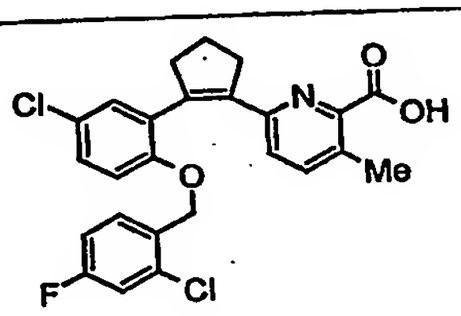
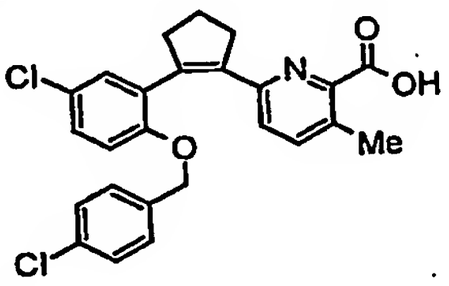
184		6-[2-(5-Chloro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-(methylthio)-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.87-1.95 (2H, m), 2.36 (3H, s), 2.71-2.74(2H, m), 2.89-2.93 (2H, m), 5.02 (2H, s), 6.91 (1H, d), 7.10-7.14 (3H, m), 7.28 (1H, d),7.37 (1H, dd), 7.56 (1H, d), 12.5 (1H,s) LC/MS: Rt=4.06 [MH+] 506.3, 508.3
185		3-Chloro-6-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.94-2.01 (2H, m), 2.82-2.86 (2H, m), 2.92-2.96 (2H, m), 5.01 (2H, s), 6.95 (1H, d), 7.10-7.15 (4H, m), 7.26-7.33 (4H, m), 7.74 (1H, d), 13.6 (1H,s) LC/MS: Rt=4.51 [MH+] 440.4
186		3-Chloro-6-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.93-2.01 (2H, m), 2.81-2.84 (2H, m), 2.91-2.95 (2H, m), 4.97 (2H, s), 6.94 (1H, d), 7.09-7.17 (6H, m), 7.32 (1H, dd), 7.74 (1H, d), 13.6 (1H,s) LC/MS: Rt=4.50 [MH+] 458.4
187		3-Chloro-6-[2-(5-chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.94-1.99 (2H, m), 2.78-2.82 (2H, m), 2.90-2.94 (2H, m), 5.07 (2H, s), 6.92 (1H, d), 7.11-7.20 (5H, m), 7.32-7.38 (2H, m), 7.73 (1H, d), 13.6 (1H,s) LC/MS: Rt=4.51 [MH+] 458.4

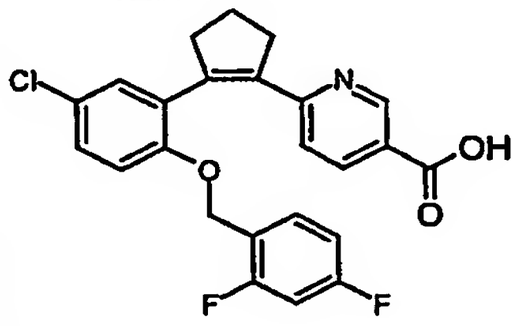
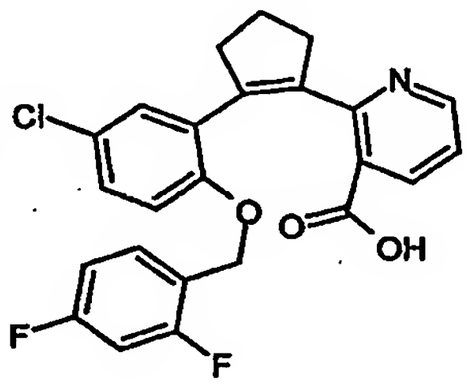
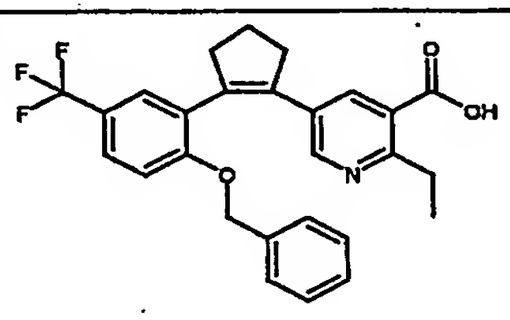
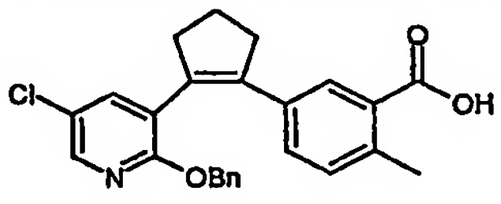
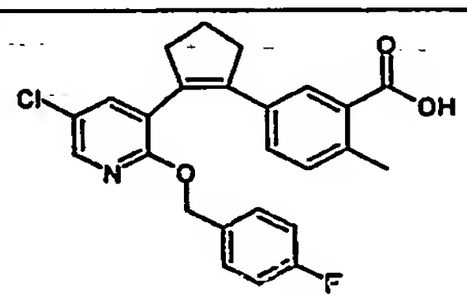
188		3-Chloro-6-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.93-1.99 (2H, m), 2.77-2.81 (2H, m), 2.89-2.93 (2H, m), 5.02 (2H, s), 6.90 (1H, d), 7.01(1H, dt), 7.14-7.26 (4H, m), 7.34 (1H, dd), 7.72 (1H, d), 13.6 (1H, br s) LC/MS: Rt=4.55 [MH+] 476.4
189		3-Chloro-6-[2-(5-chloro-2-{[(2,6-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.85-1.93 (2H, m), 2.70-2.73 (2H, m), 2.83-2.87 (2H, m), 5.07 (2H, s), 6.83 (1H, d), 7.05-7.11(3H, m), 7.27 (1H, d), 7.36-7.47 (2H, m), 7.70 (1H, d), 13.6 (1H, s) LC/MS: Rt=4.43 [MH+] 476.4
190		3-Chloro-6-[2-(5-chloro-2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.87-1.94 (2H, m), 2.70-2.74 (2H, m), 2.84-2.88 (2H, m), 5.09 (2H, s), 6.84 (1H, d), 7.10-7.15(2H, m), 7.27 (1H, d), 7.37 (1H, dd), 7.49 (1H, m), 7.71 (1H, d), 13.6 (1H, s) LC/MS: Rt=4.38 [MH+] 494.4
191		3-Chloro-6-[2-(5-chloro-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.93-2.01 (2H, m), 2.80-2.83 (2H, m), 2.91-2.94 (2H, m), 4.98 (2H, s), 6.92 (1H, d), 7.18-7.28(3H, m), 7.35 (1H, dd), 7.50 (1H, m), 7.72 (1H, d), 13.6 (1H, s) LC/MS: Rt=4.48 [MH+] 494.4

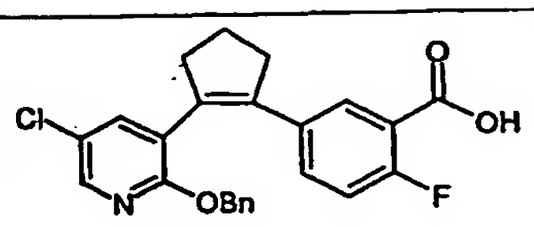
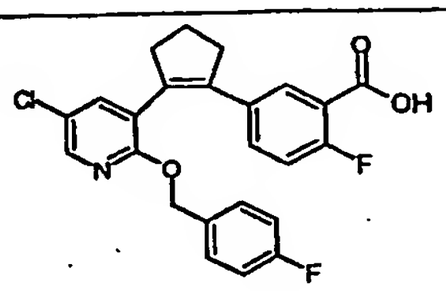
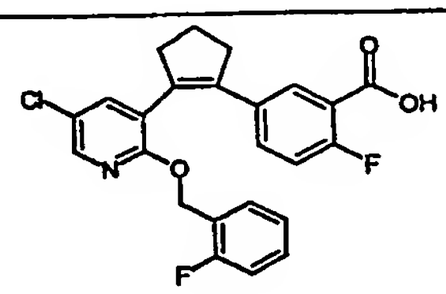
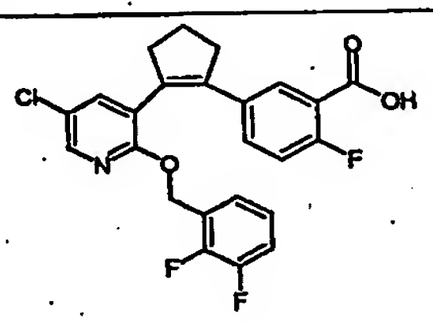
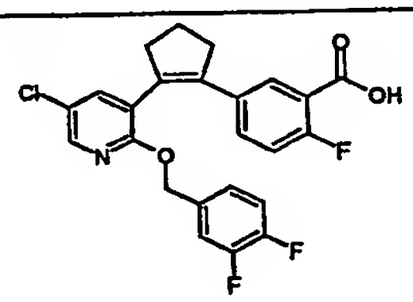
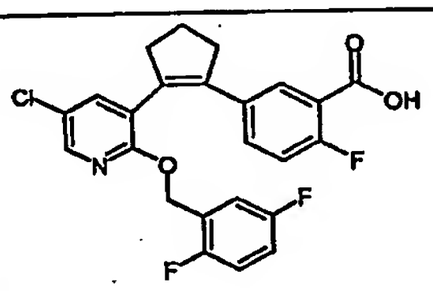
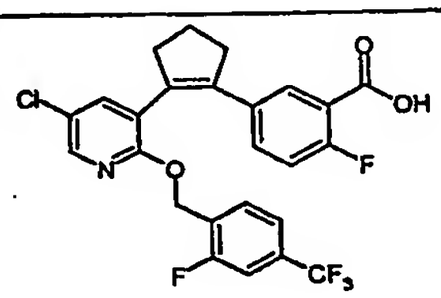
192		3-Chloro-6-[2-(5-chloro-2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.94-2.01 (2H, m), 2.81-2.85 (2H, m), 2.92-2.96 (2H, m), 4.99 (2H, s), 6.94 (1H, d), 7.08-7.17(4H, m), 7.30-7.36 (3H, m), 7.72 (1H, d), 13.7 (1H, s) LC/MS: Rt=4.78 [MH+] 476.4
193		3-Chloro-6-[2-(5-chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.93-2.00 (2H, m), 2.80-2.83 (2H, m), 2.91-2.95 (2H, m), 5.03 (2H, s), 6.92 (1H, d), 7.15-7.19(3H, m), 7.25 (1H, dd), 7.34 (1H, dd), 7.43 (1H, dd), 7.73 (1H, d), 13.6 (1H, s) LC/MS: Rt=4.86 [MH+] 494.3
194		3-Chloro-6-{2-[5-chloro-2-({[4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.94-2.03 (2H, m), 2.83-2.87 (2H, m), 2.94-2.98 (2H, m), 5.10 (2H, s), 6.97 (1H, d), 7.09(1H, d), 7.20 (1H, d), 7.29-7.35 (4H, m), 7.66 (1H, d), 7.73 (1H, d), 13.6 (1H, s) LC/MS: Rt=4.58 [MH+] 508.4
195		3-Chloro-6-{2-[5-chloro-2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.94-2.02 (2H, m), 2.81-2.84 (2H, m), 2.92-2.96 (2H, m), 5.14 (2H, s), 6.94 (1H, d), 7.17-7.20(2H, m), 7.32-7.36 (2H, m), 7.53 (1H, d), 7.65 (1H, d), 7.71 (1H, d), 13.6 (1H, s) LC/MS: Rt=4.39 [MH+] 526.3

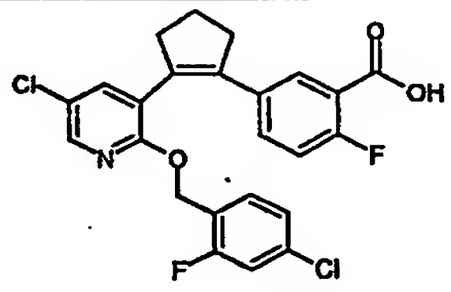
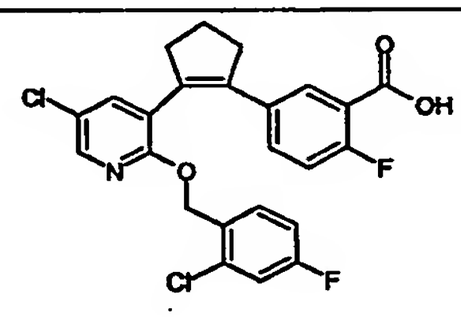
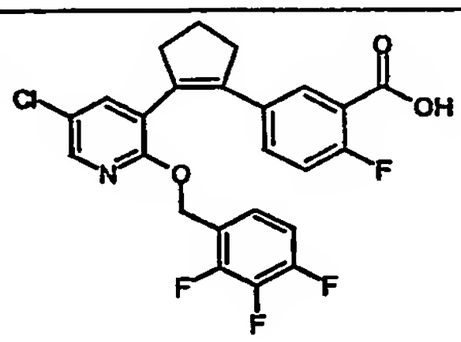
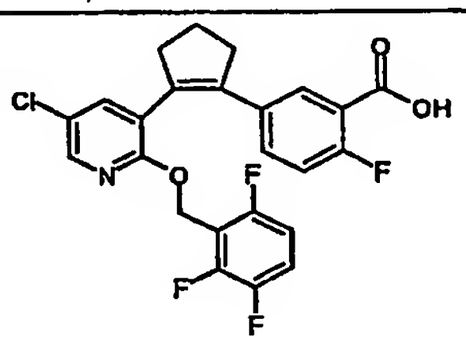
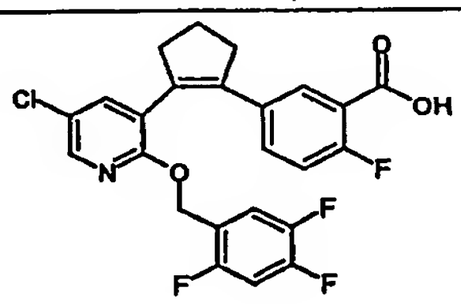
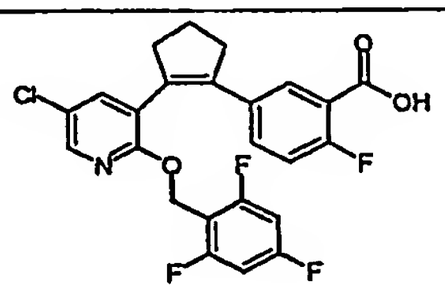
196		6-(2-{5-Chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.94-2.02 (2H, m), 2.38 (3H, s), 2.82-2.85 (2H, m), 2.93-2.99 (2H, m), 5.02 (2H, s), 6.95 (1H, d), 7.10-7.16 (4H, m), 7.26-7.32 (4H, m), 7.50 (1H, d), 12.6 (1H,s) LC/MS: Rt=4.02 [MH+] 420.4, 422.5
197		6-[2-(5-Chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.92-1.99 (2H, m), 2.37 (3H, s), 2.78-2.82 (2H, m), 2.93-2.97 (2H, m), 5.07 (2H, s), 6.92 (1H, d), 7.08-7.22 (5H, m), 7.31-7.36 (2H, m), 7.48 (1H, d), 12.6 (1H,s) LC/MS: Rt=4.04 [MH+] 438.4, 440.4
198		6-[2-(5-Chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.94-2.01 (2H, m), 2.37 (3H, s), 2.80-2.84 (2H, m), 2.94-2.98 (2H, m), 4.99 (2H, s), 6.93 (1H, d), 7.08-7.19 (6H, m), 7.31, (1H, dd), 7.49 (1H, d), 12.6 (1H,s) LC/MS: Rt=4.04 [MH+] 438.4, 440.4
199		6-[2-(5-Chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.92-1.99 (2H, m), 2.37 (3H, s), 2.77-2.80 (2H, m), 2.92-2.96 (2H, m), 5.02 (2H, s), 6.91 (1H, d), 7.00 (1H, dt), 7.10 (1H, d), 7.19-7.26 (4H, m), 7.33, (1H, dd), 7.48 (1H, d), 12.6 (1H,s) LC/MS: Rt=4.09 [MH+] 456.4, 458.4

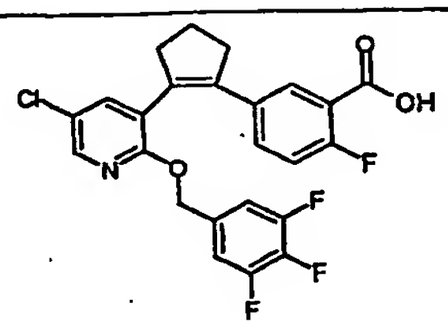
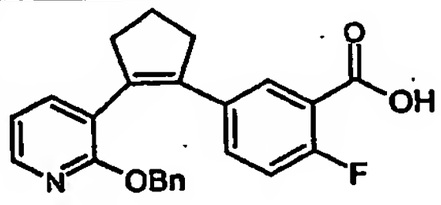
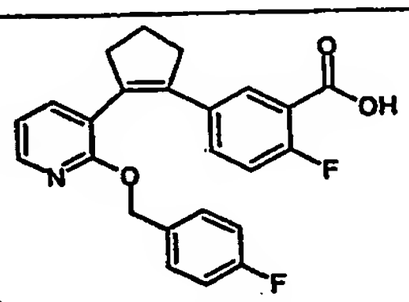
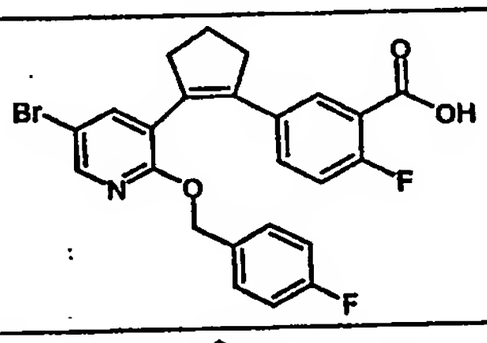
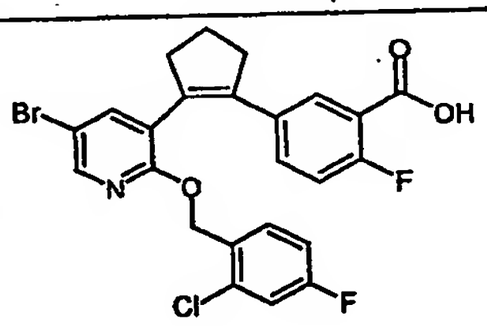
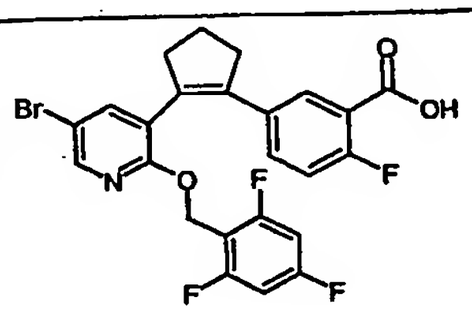
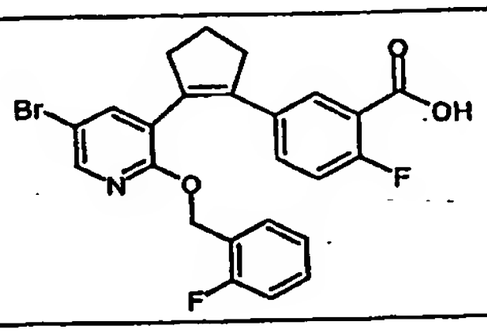
200		6-[2-(5-Chloro-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.93-2.00 (2H, m), 2.36 (3H, s), 2.79-2.82 (2H, m), 2.93-2.97 (2H, m), 4.99 (2H, s), 6.92 (1H, d), 7.15 (1H, d), 7.19-7.24 (2H, m), 7.34, (1H, dd), 7.47-7.52 (2H, m), 12.6 (1H,s) LC/MS: Rt=4.17 [MH+] 474.4, 476.4
201		6-[2-(5-Chloro-2-{[(2,3-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.93-2.00 (2H, m), 2.37 (3H, s), 2.78-2.82 (2H, m), 2.93-2.97 (2H, m), 5.11 (2H, s), 6.92 (1H, d), 7.01 (1H, t), 7.10-7.15 (2H, m), 7.20 (1H, d), 7.32-7.37 (2H, m), 7.48 (1H, d), 12.6 (1H,s) LC/MS: Rt=4.09 [MH+] 456.4, 458.4
202		6-[2-(5-Chloro-2-{[(3,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.97-2.04 (2H, m), 2.36 (3H, s), 2.83-2.86 (2H, m), 2.97-3.00 (2H, m), 4.96 (2H, s), 6.95-7.09 (4H, m), 7.19 (1H, d), 7.33, (1H, dd), 7.50 (1H, d), 12.6 (1H,s) LC/MS: Rt=4.24 [MH+] 474.4, 476.4
203		6-[2-(5-Chloro-2-{[(2-chloro-6-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.85-1.92 (2H, m), 2.38 (3H, s), 2.70-2.73 (2H, m), 2.86-2.89 (2H, m), 5.12 (2H, s), 6.85 (1H, d), 7.02 (1H, d), 7.21, (1H, t), 7.30-7.48 (5H, m), 12.5 (1H,s) LC/MS: Rt=4.24 [MH+] 472.4

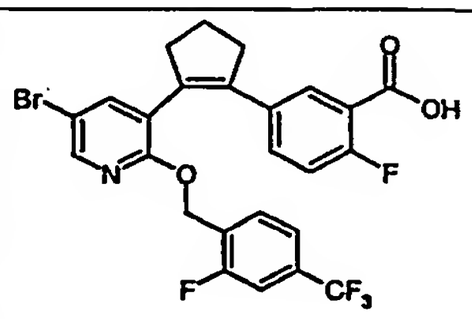
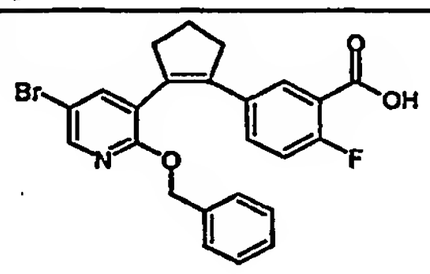
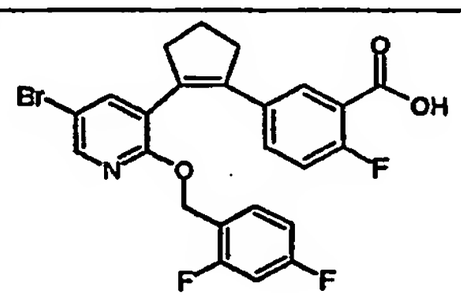
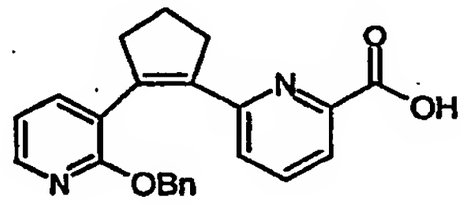
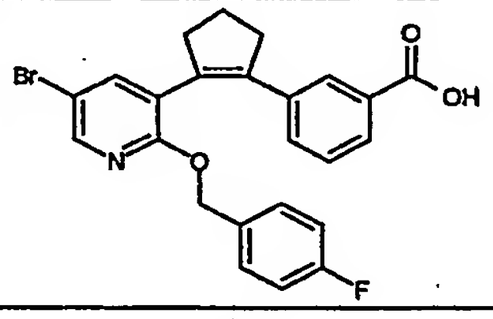
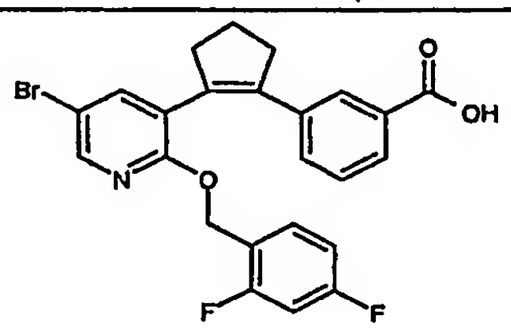
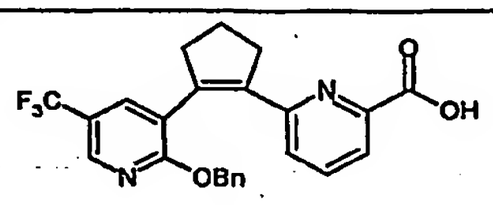
204		6-[2-(5-Chloro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.87-1.95 (2H, m), 2.38 (3H, s), 2.70-2.74 (2H, m), 2.87-2.91 (2H, m), 5.02 (2H, s), 6.85 (1H, d), 7.07 (1H, d), 7.10-7.16 (2H, m), 7.27 (1H, d), 7.36 (1H, dd), 7.47 (1H, d), 12.6 (1H,s) LC/MS: Rt=4.06 [MH+] 474.4, 476.4
205		6-[2-(5-Chloro-2-{[(2,6-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.86-1.93 (2H, m), 2.38 (3H, s), 2.70-2.73 (2H, m), 2.87-2.90 (2H, m), 5.08 (2H, s), 6.85 (1H, d), 7.03-7.09 (3H, m), 7.28 (1H, d), 7.34-7.48 (3H, m), 12.6 (1H,s) LC/MS: Rt=3.99 [MH+] 456.4, 458.4
206		6-[2-(5-Chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.94-2.00 (2H, m), 2.36 (3H, s), 2.79-2.83 (2H, m), 2.94-2.97 (2H, m), 5.03 (2H, s), 6.91 (1H, d), 7.12-7.20 (3H, m), 7.27-7.34 (2H, m), 7.41 (1H, dd), 7.48 (1H, d), 12.6 (1H,s) LC/MS: Rt=4.31 [MH+] 472.4
207		6-[2-(5-Chloro-2-{[(4-chlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-methyl-2-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.95-2.01 (2H, m), 2.37 (3H, s), 2.81-2.84 (2H, m), 2.95-2.99 (2H, m), 5.00 (2H, s), 6.94 (1H, d), 7.10-7.15 (4H, m), 7.29-7.35 (3H, m), 7.49 (1H, d), 12.6 (1H,s) t=4.26 [MH+] 454.4

208		6-[2-(5-Chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.92-2.00 (2H, m), 2.79-2.82 (2H, m), 2.94-2.98 (2H, m), 5.00 (2H, s), 6.94 (1H, d), 7.01 (1H, dt), 7.10 (1H, d), 7.15-7.27 (3H, m), 7.34 (1H, dd), 7.92 (1H, dd), 8.86 (1H), 13.2 (1H,s) LC/MS: Rt=4.25 [MH+] 442.3, 444.3
209		2-[2-(5-Chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.94-2.02 (2H, m), 2.75-2.79 (4H, m), 5.01 (2H, s), 6.73 (1H, d), 6.97 (1H, d), 7.10-7.17 (2H, m), 7.28-7.33 (2H, m), 7.52 (1H, q), 7.98 (1H, dd), 8.56 (1H, dd), 13.0 (1H,s) LC/MS: Rt=3.54 [MH+] 442.3, 444.3
210		2-Ethyl-5-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-3-pyridinecarboxylic acid	^{1}H NMR (DMSO-d_6) δ: 1.12 (3H, t), 2.00-2.07 (2H, m), 2.83-2.92 (4H, m), 2.98 (2H, q), 5.13 (2H, s), 7.19 (2H, m), 7.27-7.36 (5H, m), 7.63 (1H, dd), 7.79 (1H, d), 8.24 (1H, d), 13.2 (1H,s) LC/MS: Rt=3.87 [MH+] 468.4
211		5-(2-{5-Chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-2-methylbenzoic acid	LC/MS: Rt = 4.04min. [MH$^+$] 420, 422.
212		5-[2-(5-Chloro-2-{[(4-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-methylbenzoic acid	LC/MS: Rt = 4.04min. [MH$^+$] 438, 440.

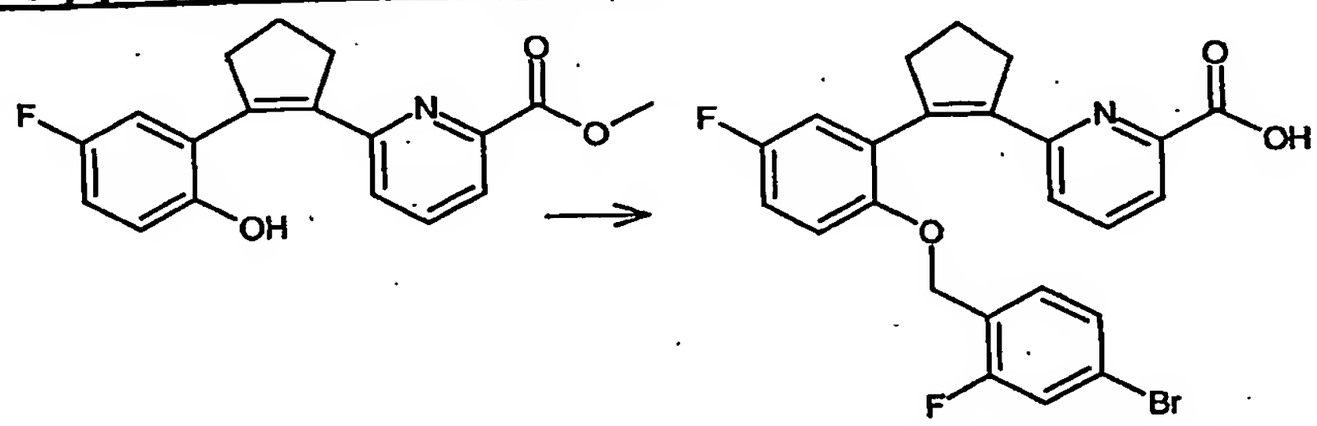
213		5-(2-{5-Chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-2-fluorobenzoic acid	LC/MS: Rt = 4.44min. [MH$^+$] 424, 426.
214		5-[2-(5-Chloro-2-{[(4-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.39min. [MH$^+$] 442, 444.
215		5-[2-(5-Chloro-2-{[(2-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.32min. [MH$^+$] 442, 444.
216		5-[2-(5-Chloro-2-{[(2,3-difluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.26min. [MH$^+$] 460, 462.
217		5-[2-(5-Chloro-2-{[(3,4-difluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.31min. [MH$^+$] 460, 462.
218		5-[2-(5-Chloro-2-{[(2,5-difluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.32min. [MH$^+$] 460, 462.
219		5-{2-[5-Chloro-2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)-3-pyridinyl]-1-cyclopenten-1-yl}-2-fluorobenzoic acid	LC/MS: Rt = 4.46min. [MH$^+$] 510, 512.

220		5-[2-(5-Chloro-2-{[(4-chloro-2-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.53min. $[MH^+]$ 476, 477, 478, 479.
221		5-[2-(5-chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.54min. $[MH^+]$ 476, 477, 478, 479.
222		5-[2-(5-Chloro-2-{[(2,3,4-trifluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.34min. $[MH^+]$ 478, 480.
223		5-[2-(5-Chloro-2-{[(2,3,6-trifluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.26min. $[MH^+]$ 478, 480.
224		5-[2-(5-Chloro-2-{[(2,4,5-trifluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.34min. $[MH^+]$ 478, 480.
225		5-[2-(5-Chloro-2-{[(2,4,6-trifluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.28min. $[MH^+]$ 478, 480.

226		5-[2-(5-Chloro-2-{[(3,4,5-trifluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.29min. $[MH^+]$ 478, 480.
227		2-Fluoro-5-(2-{2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)benzoic acid	LC/MS: Rt = 4.04min. $[MH^+]$ 390.
228		2-Fluoro-5-[2-(2-{[(4-fluorophenyl)methyl] oxy}-3-pyridinyl)-1-cyclopenten-1-yl]benzoic acid	LC/MS: Rt=4.06min $[MH^+]$ 408.
229		5-[2-(5-Bromo-2-{[(4-fluorophenyl)methyl] oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.26min. $[MH^+]$ 486, 488.
230		5-[2-(5-Bromo-2-{[(2-chloro-4-fluorophenyl)methyl] oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.25min. $[MH^+]$ 520, 522.
231		5-[2-(5-Bromo-2-{[(2,4,6-trifluorophenyl) methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.23min. $[MH^+]$ 522, 524.
232		5-[2-(5-Bromo-2-{[(2-fluorophenyl)methyl] oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt = 4.38min. $[MH^+]$ 486, 488.

233		5-{2-[5-Bromo-2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)-3-pyridinyl]-1-cyclopenten-1-yl}-2-fluorobenzoic acid	LC/MS: Rt = 4.54min. [MH$^+$] 554, 556.
234		5-(2-{5-Bromo-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-2-fluorobenzoic acid	LC/MS: Rt=4.42min [MH$^+$] 468, 470.
235		5-[2-(5-Bromo-2-{[(2,4-difluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoic acid	LC/MS: Rt=4.50min [MH$^+$] 504, 506.
236		6-(2-{2-[(Phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-2-pyridinecarboxylic acid	LC/MS: Rt=3.24min [MH$^+$] 373.
237		3-[2-(5-Bromo-2-{[(4-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]benzoic acid	LC/MS: Rt = 4.26min [MH$^+$] 468, 470
238		3-[2-(5-Bromo-2-{[(2,4-difluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]benzoic acid	LC/MS: Rt = 3.93min [MH+] 486, 488
239		6-{2-[2-(Phenylmethoxy)-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}-pyridine-2-carboxylic acid	LC/MS: LC/MS Rt=3.92min [MH$^+$] 441.

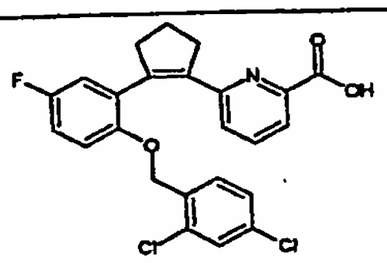
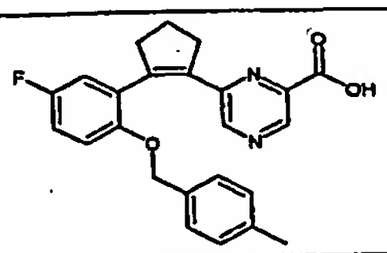
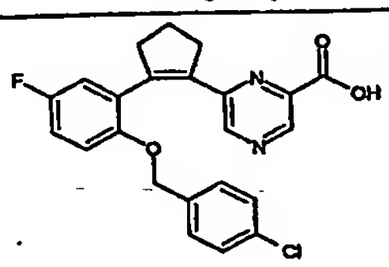
Example 240 6-[2-(2-{[(4-Bromo-2-fluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid

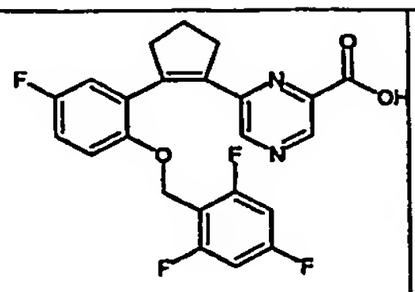
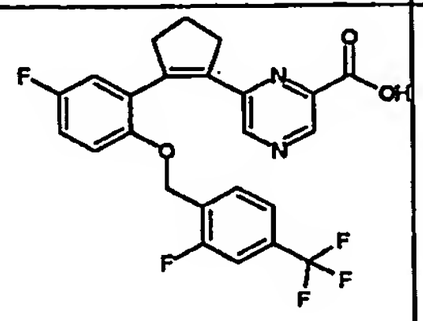
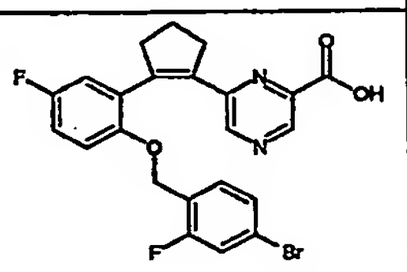
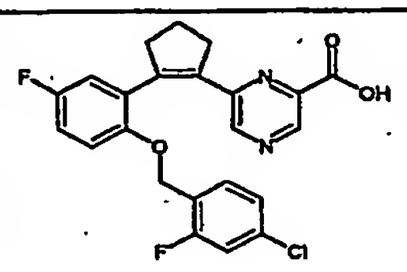
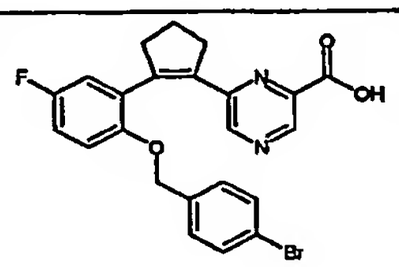
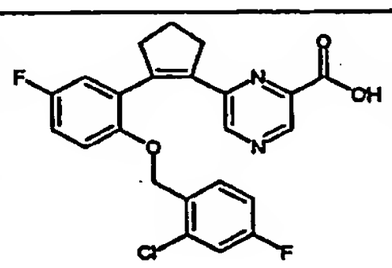
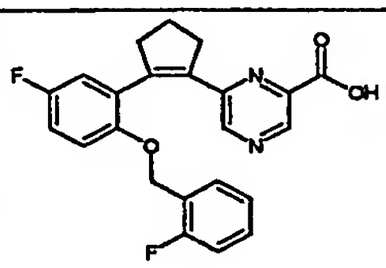


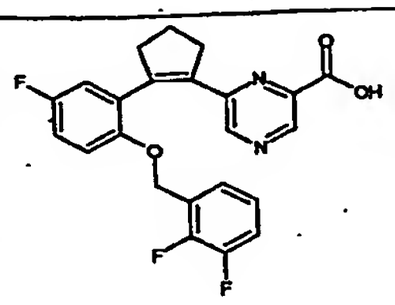
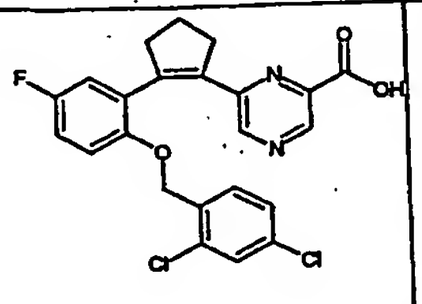
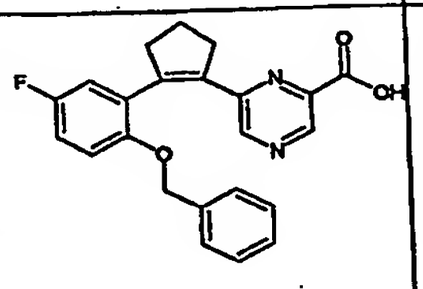
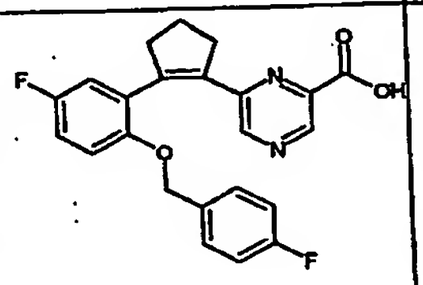
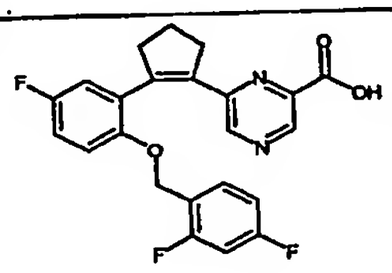
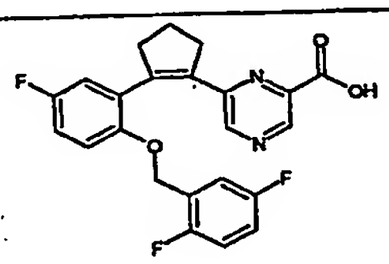
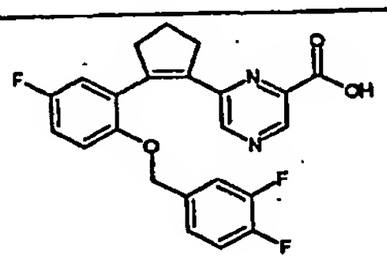
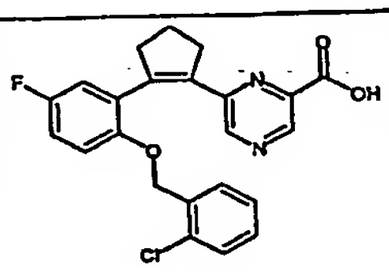
Methyl 6-[2-(5-fluoro-2-hydroxyphenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate (104mg,0.333mmol) was treated with 4-bromo-2-fluorobenzyl bromide (96mg,0.358mmol) and potassium carbonate (140mg,1.0mmol) in 2-butanone (4ml).The reaction mixture was then refluxed overnight under nitrogen, filtered through celite and reduced under vacuum to an oil.The oil was dissolved in methanol (3ml), 2M sodium hydroxide (2ml) was added and the reaction mixture stirred at 65°C for one hour. The reaction mixture was then reduced down to ~1ml under vacuum, diluted to 20ml with water and 2M hydrochloric acid (1.6ml) added as well as a couple of drops of acetic acid to pH~6, extracted with ethyl acetate (2x20ml).The organic extract was then dried over magnesium sulphate, filtered and evaporated down to a solid (69mg,42%)

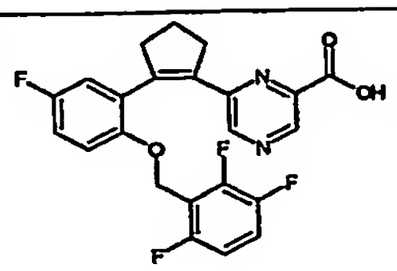
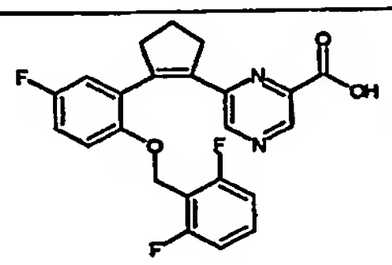
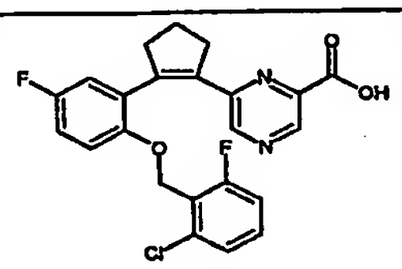
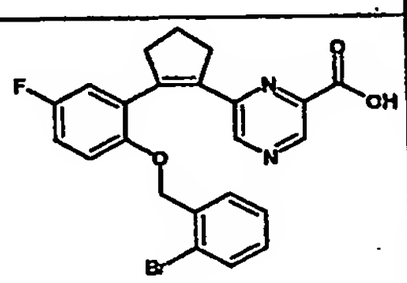
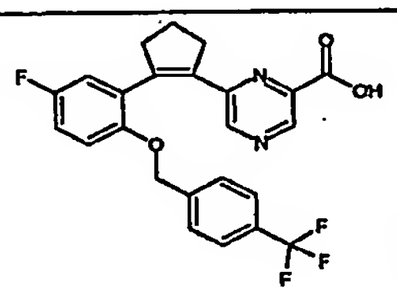
LC/MS Rt=3.94min [MH^+] 488.

The following Examples were prepared by the procedure used for 6-[2-(2-{[(4-bromo-2-fluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid:

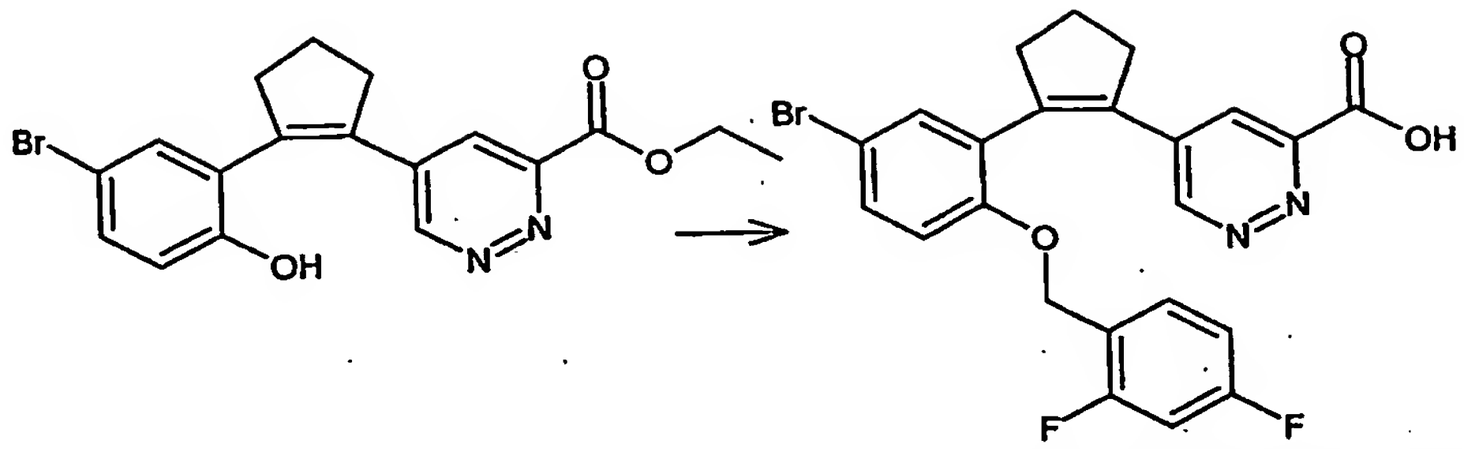
Example		Name	LC/MS
241		6-[2-(2-{[(2,4-Dichlorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid	Rt = 4.16, [MH^+] 458
242		6-[2-(5-Fluoro-2-{[(4-methylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 3.75, [MH^+] 405
243		6-[2-(2-{[(4-Chlorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.43, [MH^+] 425

244		6-[2-(5-Fluoro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.08, [MH$^+$] 445
245		6-{2-[5-Fluoro-2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid	Rt = 4.27, [MH$^+$] 475
246		6-[2-(2-{[(4-Bromo-2-fluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.57, [MH$^+$] 489
247		6-[2-(2-{[(4-Chloro-2-fluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.47, [MH$^+$] 443
248		6-[2-(2-{[(4-Bromophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.52, [MH$^+$] 471
249		6-[2-(2-{[(2-Chloro-4-fluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.51, [MH$^+$] 443
250		6-[2-(5-Fluoro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.20, [MH$^+$] 409

251		6-[2-(2-{[(2,3-Difluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.21, [MH$^+$] 427
252		6-[2-(2-{[(2,4-Dichlorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.83, [MH$^+$] 459
253		6-(2-{5-Fluoro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-pyrazinecarboxylic acid	Rt = 4.14, [MH$^+$] 391
254		6-[2-(5-Fluoro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.12, [MH$^+$] 409
255		6-[2-(2-{[(2,4-Difluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.15, [MH$^+$] 427
256		6-[2-(2-{[(2,5-Difluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.13, [MH$^+$] 427
257		6-[2-(2-{[(3,4-Difluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.14, [MH$^+$] 427
258		6-[2-(2-{[(2-Chlorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.15, [MH$^+$] 425

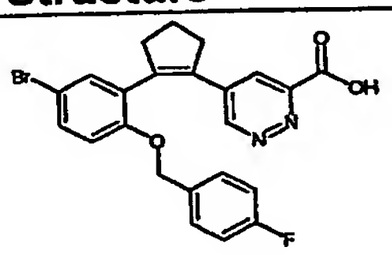
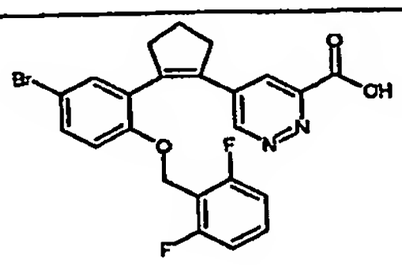
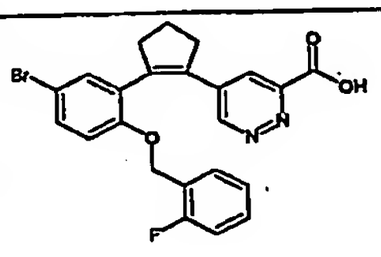
259		6-[2-(5-Fluoro-2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.03, $[MH^+]$ 445
260		6-[2-(2-{[(2,6-Difluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 5.15, $[MH^+]$ 427
261		6-[2-(2-{[(2-Chloro-6-fluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.19, $[MH^+]$ 443
262		6-[2-(2-{[(2-Bromophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylic acid	Rt = 4.51, $[MH^+]$ 471
263		6-{2-[5-Fluoro-2-({[4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyrazinecarboxylic acid	Rt = 4.25, $[MH^+]$ 459

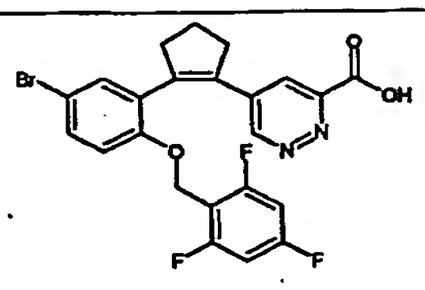
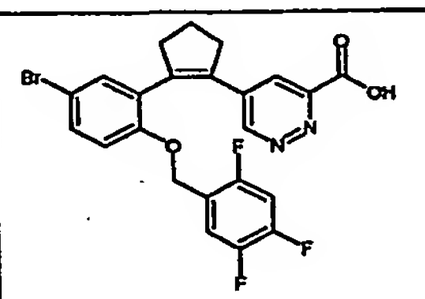
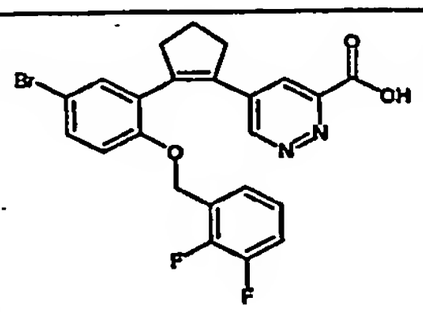
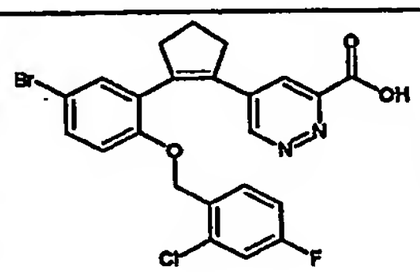
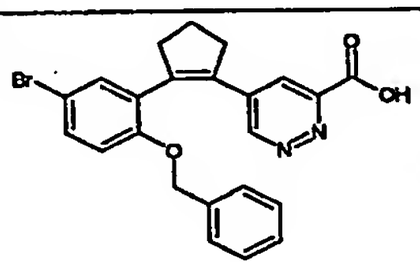
Example 264 5-[2-(5-Bromo-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-pyridazinecarboxylic acid



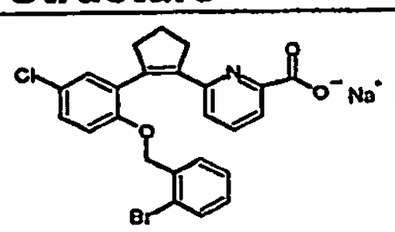
Ethyl 5-[2-(5-bromo-2-hydroxyphenyl)-1-cyclopenten-1-yl]-3-pyridazinecarboxylate (130mg. 0.333mmol) in dimethylformamide (4ml) was treated with 2,4-difluorobenzyl bromide (80mg, 0.386mmol) and potassium carbonate (200mg, 1.45mmol). The reaction mixture was then stirred at room temperature for 5 hours, filtered through celite, and washed with ethyl acetate (3x15ml). The filtrate was then washed with brine (2x50ml), dried over magnesium sulphate and chromatographed, eluting with 1:1 diethyl ether/isohexane. The product was dissolved in 2M sodium hydroxide (2ml) and methanol (3ml) and heated with stirring for one hour at 70°C. The mixture was evaporated to ~1ml,diluted to 10ml with water and treated with 2M hydrochloric acid (1.8ml) and a couple of drops of acetic acid. The mixture was extracted with ethyl acetate (3x10ml), dried over magnesium sulphate, filtered and evaporated to give the title compound (120mg,75% yield)
LC/MS Rt=4.25 min [MH^+] 489

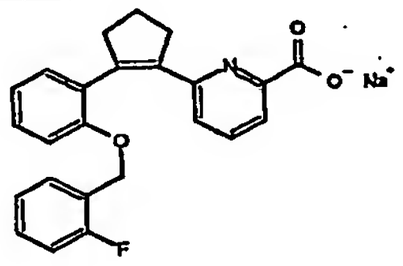
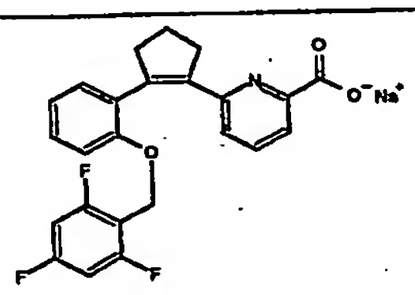
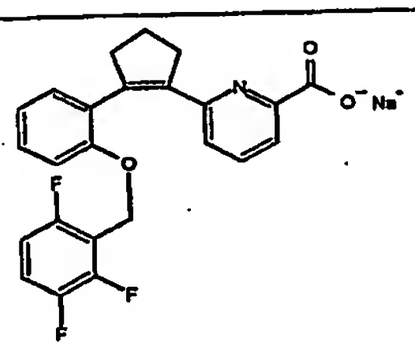
The following Examples were prepared by the procedure used for 5-[2-(5-bromo-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-pyridazinecarboxylic acid:

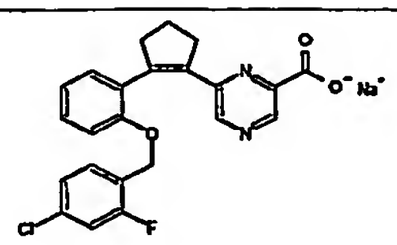
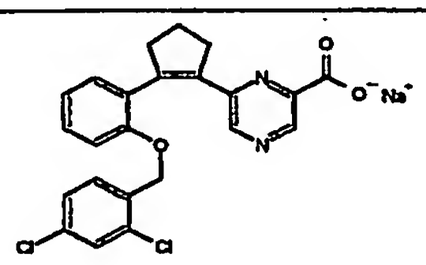
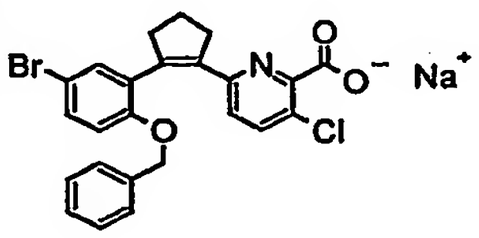
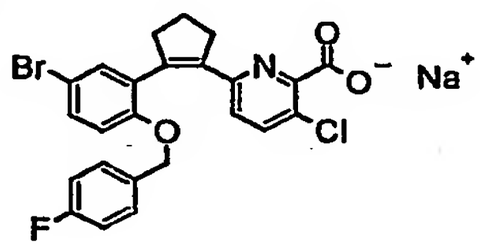
Example	Structure	Name	^{1}H NMR/LCMS
265		5-[2-(5-Bromo-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-pyridazinecarboxylic acid	^{1}H NMR (CD_3OD) 2.05-2.15(2H,m) 2.85-2.97(4H,m) 4.84(2H,s) 6.93-7.04(3H,m) 7.06-7.13(2H,m) 7.25-7.29(1H,d) 7.40-7.45(1H,dd) 7.83(1H,s) 8.69(1H,s)
266		5-[2-(5-Bromo-2-{[(2,6-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-pyridazinecarboxylic acid	Rt = 4.19, [MH^+] 489
267		5-[2-(5-Bromo-2-{[(2-fluorophenyl)methyl]oxy}phenyl-1-cyclopenten-1-yl]-3-pyridazinecarboxylic acid	Rt = 4.29, [MH^+] 471

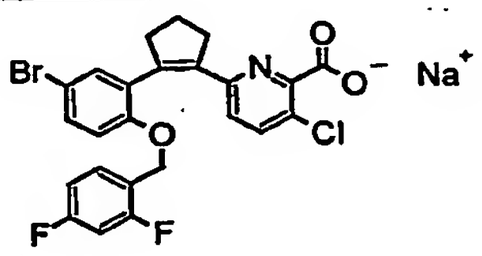
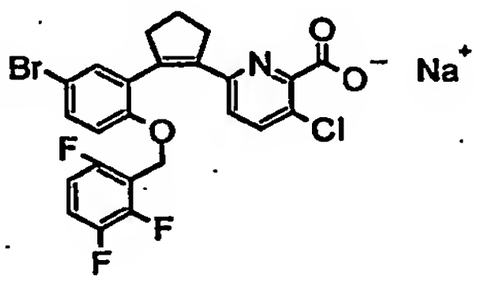
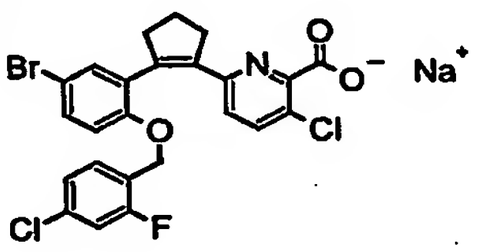
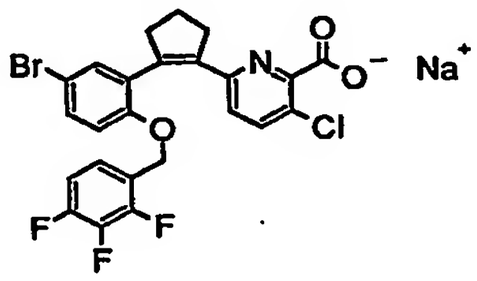
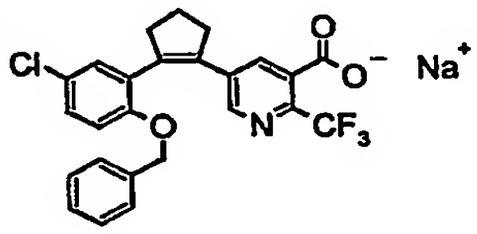
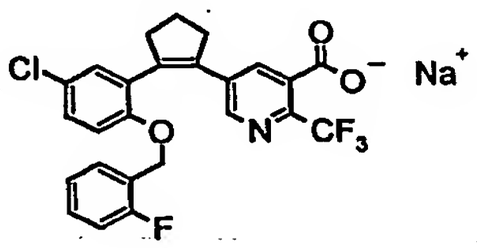
268		5-[2-(5-Bromo-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-pyridazinecarboxylic acid	Rt = 4.19, [MH$^+$] 535
269		5-[2-(5-Bromo-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-pyridazinecarboxylic acid	Rt = 4.30, [MH$^+$] 507
270		5-[2-(5-Bromo-2-{[(2,3-difluorophenyl)methyl[oxy}phenyl)-1-cyclopenten-1-yl]-3-pyridazinecaboxylic acid	Rt = 4.27, [MH$^+$] 489
271		5-[2-(5-Bromo-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-pyridazinecarboxylic acid.	Rt = 4.61, [MH$^+$] 505
272		5-[2-(5-Bromo-2-[(phenylmethyl)oxy]phenyl)-1-cyclopenten-1-yl]-3-pyridazinecarboxylic acid	Rt = 4.39, [MH$^+$] 453

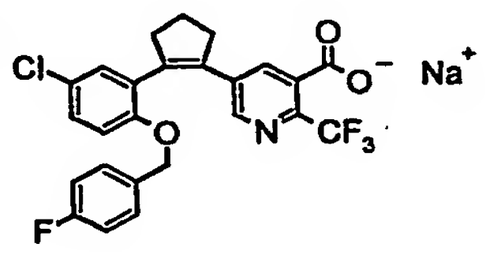
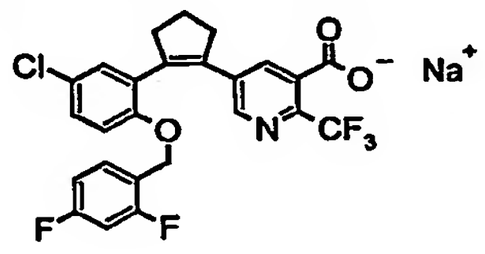
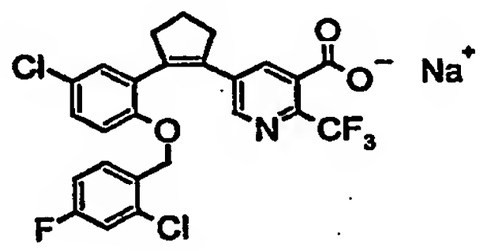
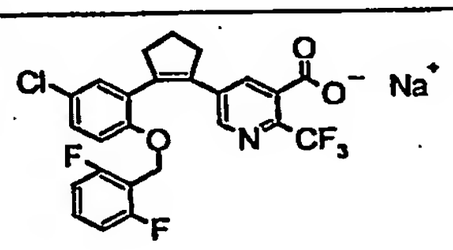
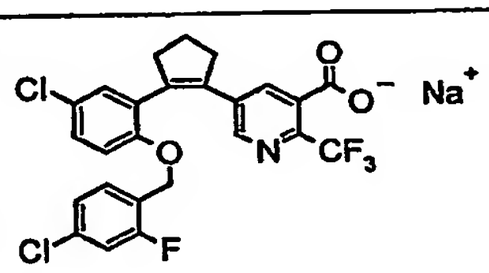
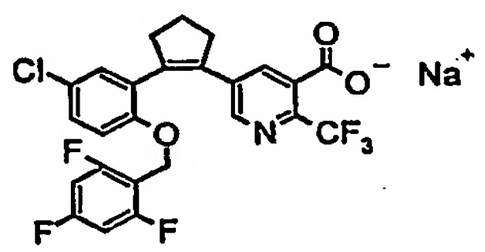
The following Examples were prepared by Standard Hydrolysis Procedure B:

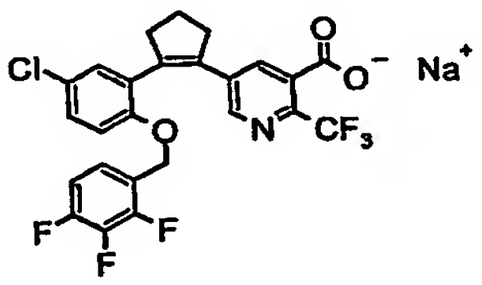
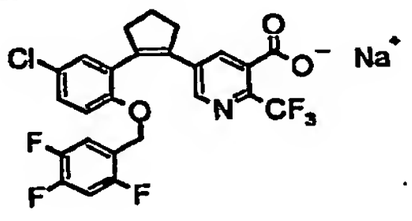
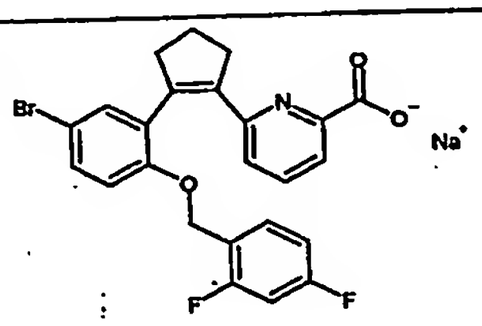
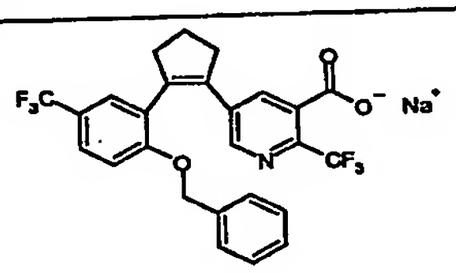
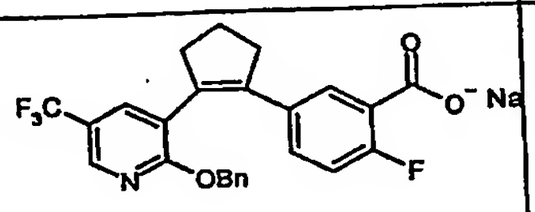
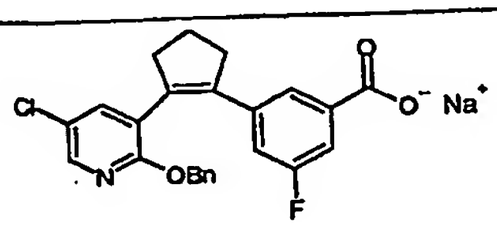
Example	Structure	Name	Data
273		Sodium 6-[2-(2-{[(2-bromophenyl)methyl]oxy}-5-chlorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	^{1}H NMR (DMSO) δ: 1.91-1.97(2H, m), 2.79-2.83 (2H, m), 2.93-2.98 (2H, m), 5.12 (2H, s), 6.63 (1H, d), 6.96 (1H, s), 7.12 (1H, d), 7.26-7.38 (5H, m), 7.50 (1H, d), 7.64 (1H, d).

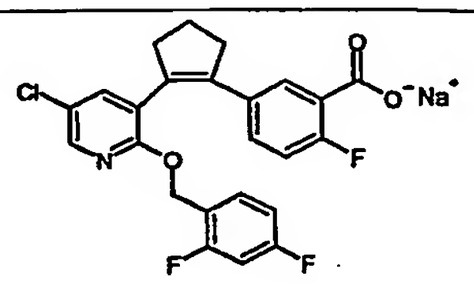
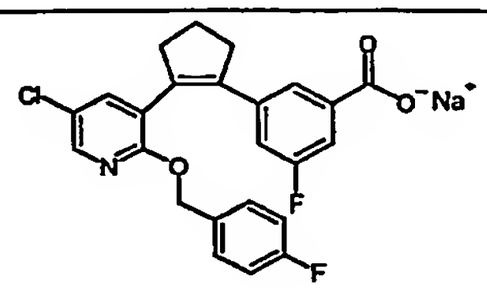
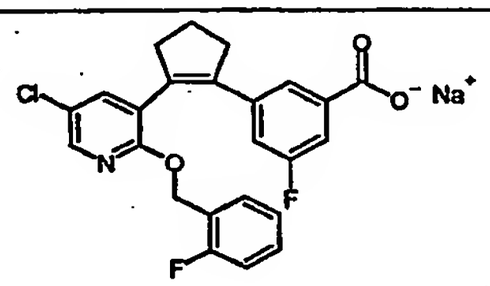
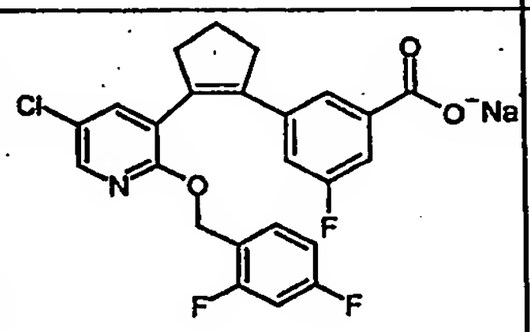
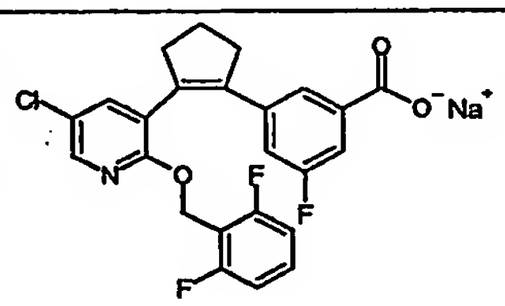
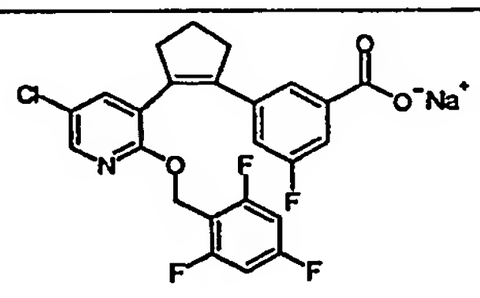
274		Sodium 6-[2-(2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	^{1}H NMR ($CDCl_3$) δ: 1.91-1.98 (2H, m), 2.95-2.98 (2H, m), 5.10 (2H, s), 6.66-6.72 (2H, m), 6.78-6.80 (1H, m), 7.03 (1H, d), 7.08-7.16 (3H, m), 7.29-7.32 (2H, m), 7.38-7.41 (1H, m), 7.60 (1H, d). LC/MS: Rt = 3.38 min, [M+H] 390.
275		Sodium 6-[2-(2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	^{1}H NMR (DMSO, 50^{0}C) δ: 1.85-1.96 (2H, m), 2.67-2.93 (4H, m), 5.05 (2H, s), 6.69-6.75 (3H, m), 6.95-7.00 (2H, m), 7.09 (1H, d), 7.14-7.18 (1H, m), 7.35-7.40 (1H, m), 7.64 (1H, d). LC/MS: Rt = 3.40 min, [M+H] 426.
276		Sodium 6-[2-(2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	^{1}H NMR (DMSO) δ: 1.86-1.94 (2H, m), 2.70-2.73 (2H, m), 2.88-2.92 (2H, m), 5.24 (2H, s), 6.57 (1H, d), 6.85-6.86 (2H, m), 7.20-7.29 (3H, m), 7.32-7.35 (1H, m), 7.51-7.58 (1H, m), 7.62 (1H, d). LC/MS: Rt = 3.38 min, [M+H] 426.

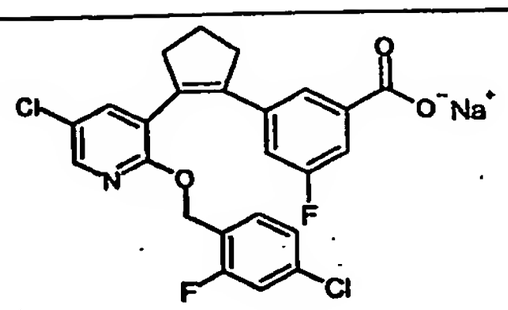
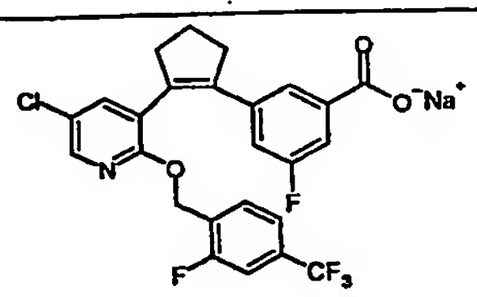
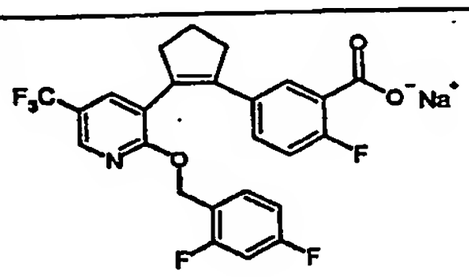
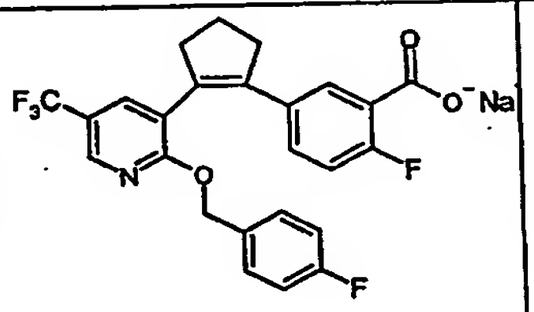
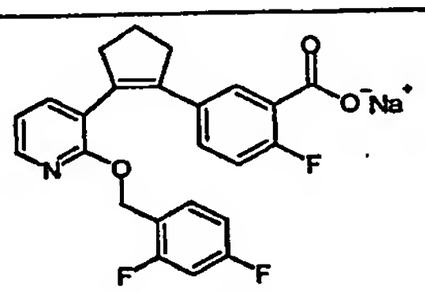
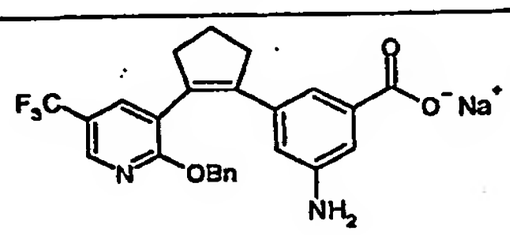
277		Sodium 6-[2-(2-{[(4-chloro-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	^{1}H NMR (DMSO) δ: 1.94-2.01 (2H, m), 2.80-2.85 (2H, m), 2.95-2.98 (2H, m), 5.12 (2H, s), 6.89-6.94 (1H, m), 6.98 (1H, dd), 7.18 (1H, d), 7.27-7.30 (2H, m), 7.44 (1H, dd), 7.74 (1H, s), 8.55 (1H, s). LC/MS: Rt = 4.48 min, [M–H] 423, 425.
278		Sodium 6-[2-(2-{[(2,4-dichlorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyrazinecarboxylate	^{1}H NMR (DMSO) δ: 1.95-2.03 (2H, m), 2.83-2.87 (2H, m), 2.95-2.99 (2H, m), 5.12 (2H, s), 6.91-6.94 (1H, m), 7.01 (1H, dd), 7.15 (1H, d), 7.28-7.33 (2H, m), 7.43 (1H, dd), 7.63 (1H, d), 7.77 (1H, s), 8.56 (1H, s). LC/MS: Rt = 4.98 min, [M–H] 439, 441.
279		6-(2-{5-Bromo-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-3-chloro-2-pyridinecarboxylic acid sodium salt	LC/MS: Rt=4.43, [MH+] 486.3
280		6-[2-(5-Bromo-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-chloro-2-pyridinecarboxylic acid sodium salt	LC/MS: Rt=4.38 [MH+] 504.3

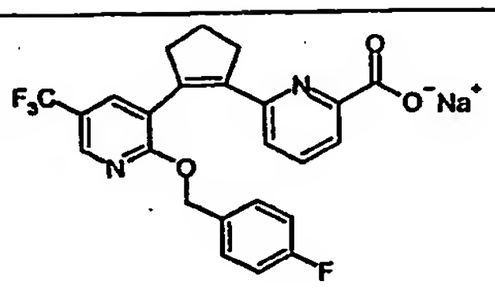
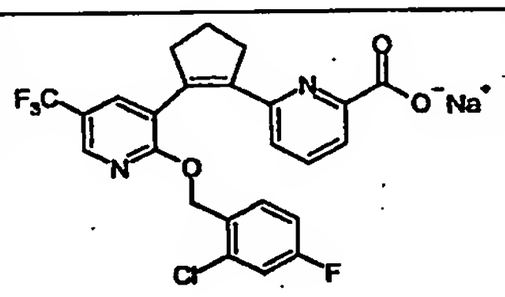
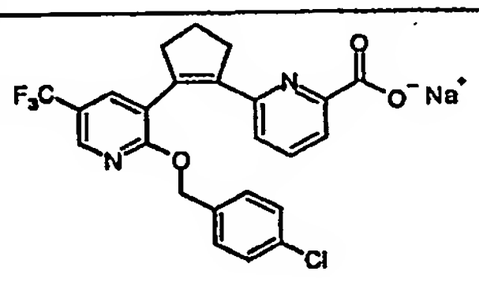
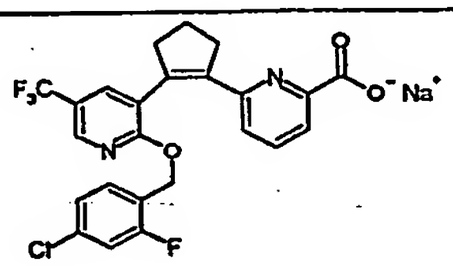
281		Sodium 6-[2-(5-bromo-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-chloro-2-pyridinecarboxylate	LC/MS: Rt=4.42 [MH+] 522.3
282		Sodium 6-[2-(5-bromo-2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-chloro-2-pyridinecarboxylate	LC/MS: Rt=4.27 [MH+] 540.3
283		Sodium 6-[2-(5-bromo-2-{[(4-chloro-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-chloro-2-pyridinecarboxylate	LC/MS: Rt=4.65 [MH+] 538.3
284		Sodium 6-[2-(5-bromo-2-{[(2,3,4-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-3-chloro-2-pyridinecarboxylate	LC/MS: Rt=4.44 [MH+] 540.3
285		Sodium 5-(2-{5-chloro-2-[(phenylmethyl)oxy]phenyl}-1-cyclopenten-1-yl)-2-(trifluoromethyl)-3-pyridinecarboxylate	LC/MS: Rt=3.37, [MH+] 474.4, 476.3
286		Sodium 5-[2-(5-chloro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	LC/MS: Rt=4.30 [MH+] 492.3, 494.3

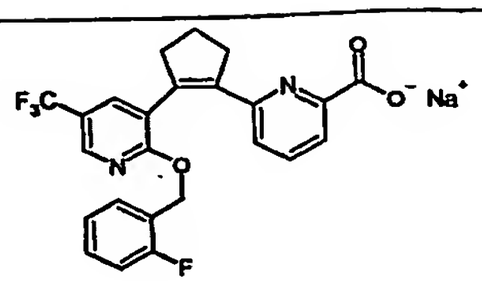
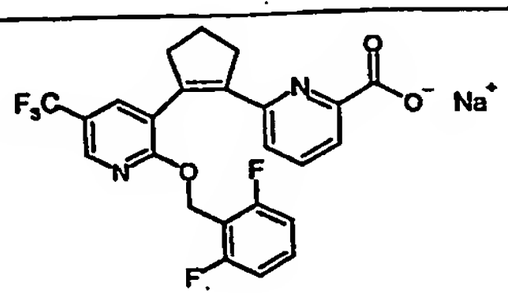
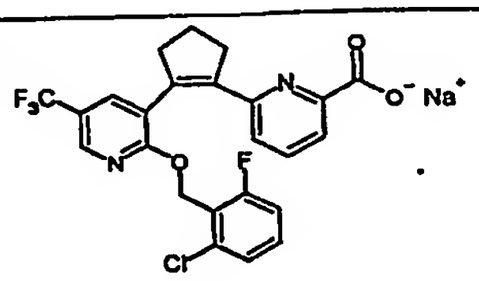
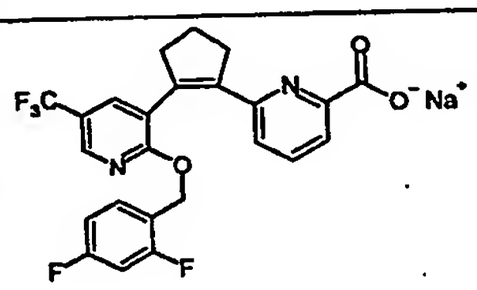
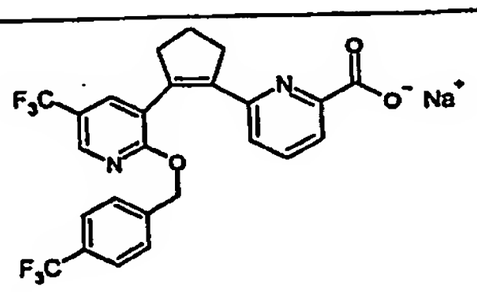
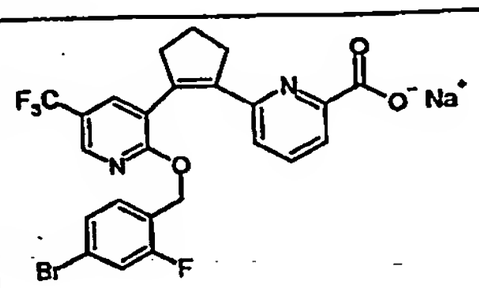
287		Sodium 5-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	LC/MS: Rt=3.83 [MH+] 492.3, 494.3
288		Sodium 5-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	LC/MS: Rt=4.02 [MH+] 510.3, 512.3
289		Sodium 5-[2-(5-chloro-2-{[(2-chloro-4-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	LC/MS: Rt=4.25 [MH+] 526.3
290		Sodium 5-[2-(5-chloro-2-{[(2,6-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	LC/MS: Rt=4.08 [MH+] 510.3, 512.3
291		Sodium 5-[2-(5-chloro-2-{[(4-chloro-2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	LC/MS: Rt=4.37 [MH+] 526.3
292		Sodium 5-[2-(5-chloro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	LC/MS: Rt=4.15 [MH+] 528.3, 530.3

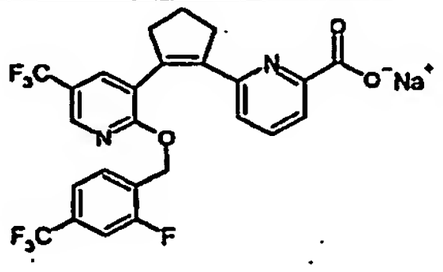
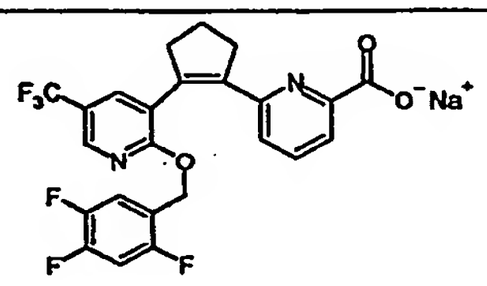
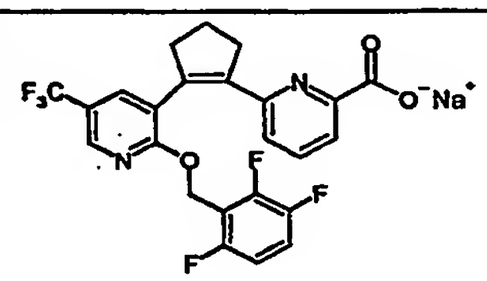
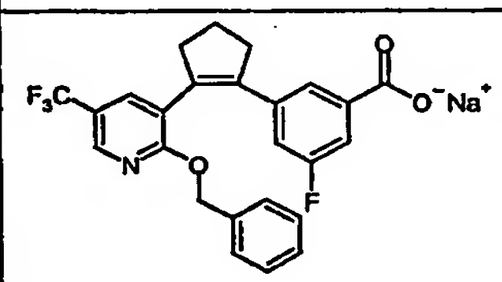
293		Sodium 5-[2-(5-chloro-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylate	LC/MS: Rt=4.24 [MH+] 528.3, 530.3
294		5-[2-(5-Chloro-2-{[(2,4,5-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-(trifluoromethyl)-3-pyridinecarboxylic acid sodium salt	LC/MS: Rt=4.17 [MH+] 528.3, 530.3
295		Sodium 6-[2-(5-bromo-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	LC/MS: Rt = 3.92 min. [M+H] = 486,488.
296		Sodium 5-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}-2-(trifluoromethyl)-3-pyridinecarboxylate.	LC/MS: Rt = 3.84min. [M+H] = 508
297		Sodium 2-fluoro-5-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}benzoate	LC/MS: Rt = 4.41min. [MH^+] 458
298		Sodium 3-(2-{5-chloro-2-[(phenylmethyl)oxy]-3-pyridinyl}-1-cyclopenten-1-yl)-5-fluorobenzoate	LC/MS: Rt = 4.35min. [MH^+] 424, 426.

299		Sodium 5-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	LC/MS: Rt = 4.42min. $[MH^+]$ 460, 462.
300		Sodium 3-[2-(5-chloro-2-{[(4-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-5-fluorobenzoate	LC/MS: Rt = 4.36min. $[MH^+]$ 442, 444.
301		Sodium 3-[2-(5-chloro-2-{[(2-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-5-fluorobenzoate	LC/MS: Rt = 4.41min. $[MH^+]$ 442, 444.
302		Sodium 3-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-5-fluorobenzoate	LC/MS: Rt = 4.42min. $[MH^+]$ 460, 462.
303		Sodium 3-[2-(5-chloro-2-{[(2,6-difluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-5-fluorobenzoate	LC/MS: Rt = 4.35min. $[MH^+]$ 460, 462.
304		Sodium 3-[2-(5-chloro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-5-fluorobenzoate	LC/MS: Rt = 4.39min. $[MH^+]$ 478, 480.

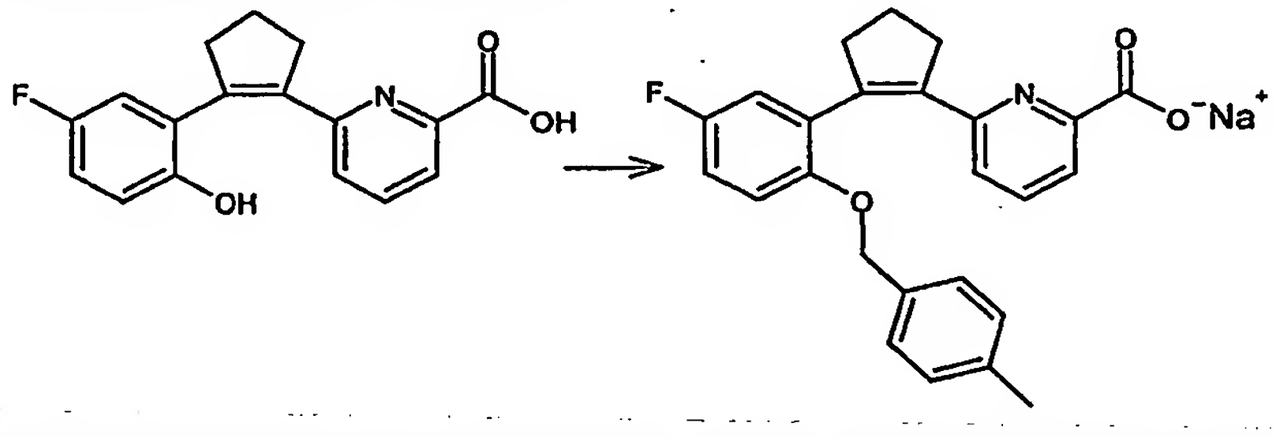
305		Sodium 3-[2-(5-chloro-2-{[(4-chloro-2-fluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-5-fluorobenzoate	LC/MS: Rt = 4.62min. $[MH^+]$ 476, 477, 478, 479.
306		Sodium 3-{2-[5-chloro-2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)-3-pyridinyl]-1-cyclopenten-1-yl}-5-fluorobenzoate	LC/MS: Rt = 4.56min. $[MH^+]$ 508, 510.
307		Sodium 5-{2-[2-{[(2,4-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-fluorobenzoate	LC/MS: Rt = 4.43min. $[MH^+]$ 494.
308		Sodium 2-fluoro-5-{2-[2-{[(4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}benzoate	LC/MS: Rt = 4.30min. $[MH^+]$ 476.
309		Sodium 5-[2-(2-{[(2,4-difluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-fluorobenzoate	LC/MS: Rt=4.20min $[MH^+]$ 426.
310		Sodium 3-amino-5-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}benzoate	^{1}H NMR (MeOD) δ: 1.99-2.08(2H, m), 2.80-2.92(4H, m), 5.35(2H, s), 6.44(1H, t), 7.15(2H, dt), 7.23-7.35(5H, m), 7.51(1H, d), 8.27-8.29(1H,m). LC/MS Rt=3.71min $[MH^+]$ 455.

311		Sodium 6-{2-[2-{[(4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	^{1}H NMR (MeOD) δ: 2.03-2.11(2H, m), 2.86-2.91(2H, m), 3.08-3.13(2H, m), 5.31(2H, s), 6.79(1H, d), 7.03(2H, t), 7.26-7.30(2H, m), 7.44(1H, t), 7.61(1H, d), 7.72(1H, d), 8.34(1H,s). LC/MS Rt=3.88min [MH$^+$] 459.
312		Sodium 6-{2-[2-{[(2-chloro-4-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	^{1}H NMR (MeOD) δ: 2.03-2.11(2H, m), 2.85-2.90(2H, m), 3.08-3.13(2H, m), 5.38(2H, s), 6.81(1H, d), 7.15-7.20(2H, m), 7.25(1H, t), 7.46(1H, t), 7.63(1H, d), 7.72(1H, d), 8.35(1H,s). LC/MS Rt=4.07min [MH$^+$] 493.
313		Sodium 6-{2-[2-{[(4-chlorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	^{1}H NMR (MeOD) δ: 2.04-2.12(2H, m), 2.87-2.92(2H, m), 3.09-3.14(2H, m), 5.31(2H, s), 6.80(1H, d), 7.23(2H, d), 7.29-7.34(2H, m), 7.45(1H, t), 7.63(1H, d), 7.72(1H, d), 8.34(1H,s). LC/MS Rt=4.04min [MH$^+$] 475.
314		Sodium 6-{2-[2-{[(4-chloro-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS: Rt=4.07min [MH$^+$] 493

315		Sodium 6-{2-[2-{[(2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS: Rt=3.88min $[MH^+]$ 459
316		Sodium 6-{2-[2-{[(2,6-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS: Rt=3.85min $[MH^+]$ 477
317		Sodium 6-{2-[2-{[(2-chloro-6-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS: Rt=3.98min $[MH^+]$ 493
318		Sodium 6-{2-[2-{[(2,4-difluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS: Rt=3.91min $[MH^+]$ 477
319		Sodium 6-{2-[5-(trifluoromethyl)-2-({[4-(trifluoromethyl)phenyl]methyl}oxy)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS: Rt=4.04min $[MH^+]$ 509
320		Sodium 6-{2-[2-{[(4-bromo-2-fluorophenyl)methyl]oxy}-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS: Rt=4.11min $[MH^+]$ 537, 539

321		Sodium 6-{2-[2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	LC/MS: Rt=4.07min [MH$^+$] 527
322		Sodium 6-[2-(5-(trifluoromethyl)-2-{[(2,4,5-trifluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	LC/MS: Rt=3.94min [MH$^+$] 495
323		Sodium 6-[2-(5-(trifluoromethyl)-2-{[(2,3,6-trifluorophenyl)methyl]oxy}-3-pyridinyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	LC/MS: Rt=3.87min [MH$^+$] 495
324		Sodium 3-fluoro-5-{2-[2-[(phenylmethyl)oxy]-5-(trifluoromethyl)-3-pyridinyl]-1-cyclopenten-1-yl}benzoate	LC/MS Rt=4.22min [MH$^+$] 458.

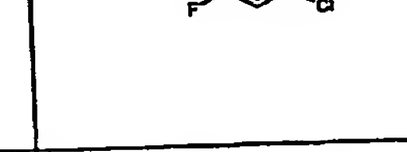
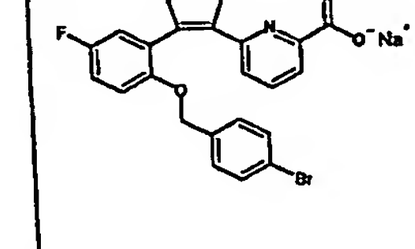
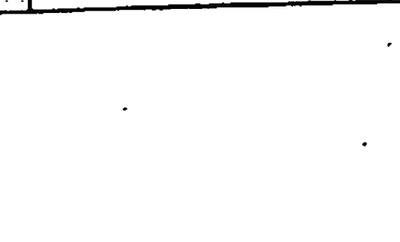
Example 325 Sodium 6-[2-(5-fluoro-2-{[(4-methylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate

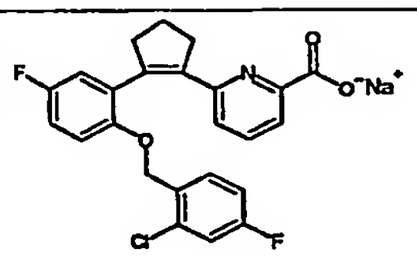
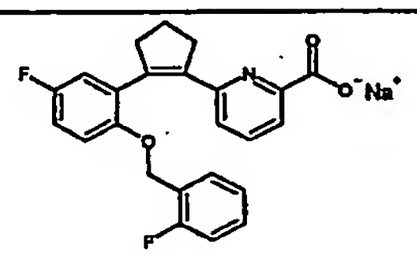
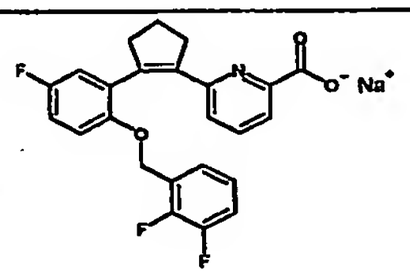
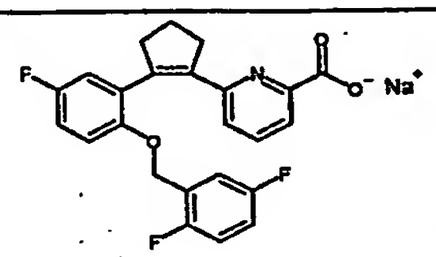
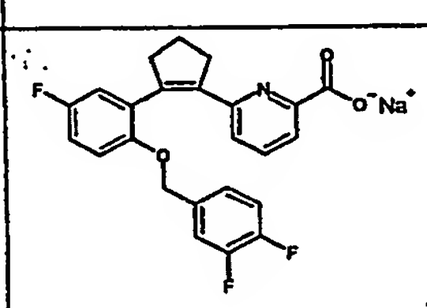
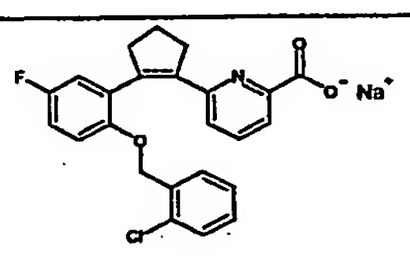
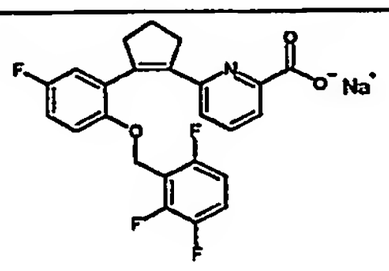
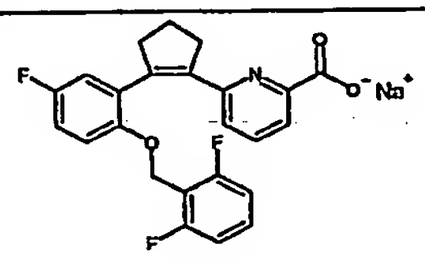


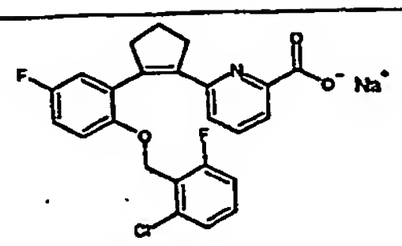
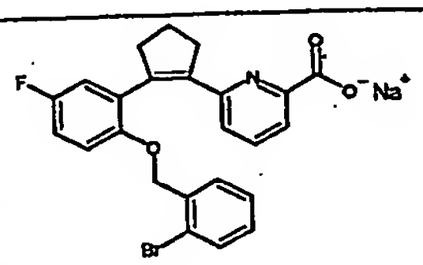
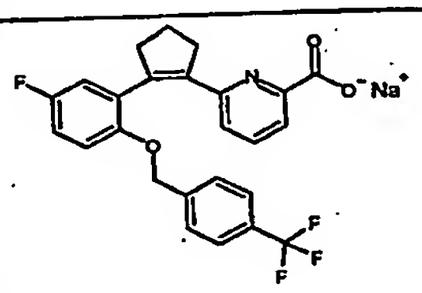
6-{2-[5-Fluoro-2-hydroxyphenyl]-1-cyclopenten-1-yl}2-pyridinecarboxylic acid methyl ester (104mg, 0.333mmol) in dimethylformamide (4ml) was treated with 4-methylbenzyl bromide (66mg, 0.356mmol) and potassium carbonate (140mg,1.0mmol). The reaction mixture was then refluxed overnight under nitrogen, filtered through celite and reduced under vacuum

to an oil. The oil was dissolved in methanol (3ml), 2M sodium hydroxide (2ml) was added and the reaction mixture stirred at 65°C for one hour. The reaction mixture was then reduced down to ~ 1ml under vacuum, diluted to 20ml with water and extracted with ethyl acetate (2X20ml). The organic extract was then washed with brine (20ml), dried over sodium sulphate and evaporated down under reduced pressure to the required product (52mg,36%). LC/MS Rt=3.73min [MH^+] 404.

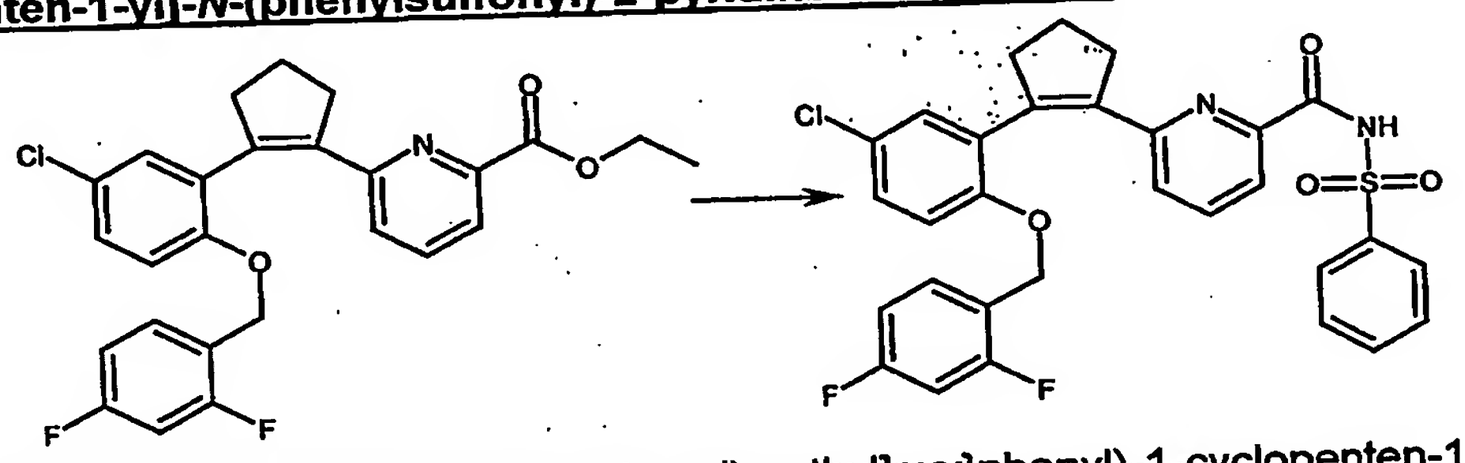
The following Examples were prepared by the procedure used for sodium 6-[2-(5-fluoro-2-{[(4-methylphenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate:

Example	Structure	Name	LC/MS
326		Sodium 6-[2-(2-{[(4-chlorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.83, [MH^+] 424
327		Sodium 6-[2-(5-fluoro-2-{[(2,4,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.58, [MH^+] 444
328		Sodium 6-{2-[5-fluoro-2-({[2-fluoro-4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 3.94, [MH^+] 476
329		Sodium 6-[2-(2-{[(4-chloro-2-fluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.89, [MH^+] 442
330		Sodium 6-[2-(2-{[(4-bromophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.90, [MH^+] 470

331		Sodium 6-[2-(2-{[(2-chloro-4-fluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.88, [MH^+] 442
332		Sodium 6-[2-(5-fluoro-2-{[(2-fluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.57, [MH^+] 408
333		Sodium 6-[2-(2-{[(2,3-difluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.64, [MH^+] 426
334		Sodium 6-[2-(2-{[(2,5-difluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.67, [MH^+] 426
335		Sodium 6-[2-(2-{[(3,4-difluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.68, [MH^+] 426
336		Sodium 6-[2-(2-{[(2-chlorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.84, [MH^+] 424
337		Sodium 6-[2-(5-fluoro-2-{[(2,3,6-trifluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.57, [MH^+] 444
338		Sodium 6-[2-(2-{[(2,6-difluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.49, [MH^+] 426

339		Sodium 6-[2-(2-{[(2-chloro-6-fluorophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.66, [MH$^+$] 442
340		Sodium 6-[2-(2-{[(2-bromophenyl)methyl]oxy}-5-fluorophenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate	Rt = 3.90, [MH$^+$] 470
341		Sodium 6-{2-[5-fluoro-2-({[4-(trifluoromethyl)phenyl]methyl}oxy)phenyl]-1-cyclopenten-1-yl}-2-pyridinecarboxylate	Rt = 3.88, [MH$^+$] 458

Example 342 6-[2-(5-Chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-*N*-(phenylsulfonyl)-2-pyridinecarboxamide



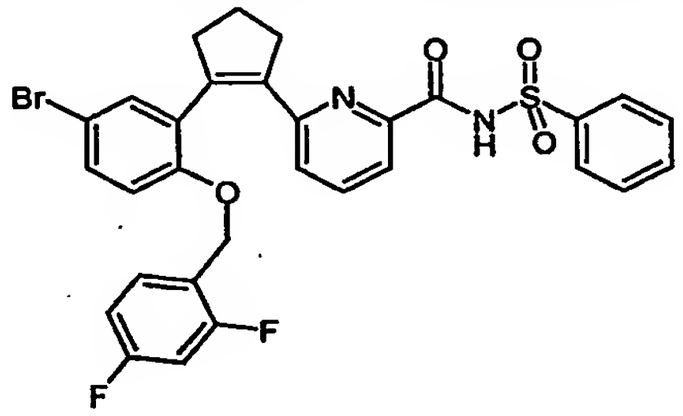
a) Ethyl 6-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylate (140mg, 0.30mmol) was dissolved in ethanol (5ml) and 2M sodium hydroxide (1ml) and heated to reflux then left to cool for 60 minutes. The solution was diluted with water then extracted with isohexane and acidified to pH4 with hydrochloric acid. The mixture was extracted with diethyl ether. The organic solution was dried over magnesium sulphate and evaporated to give 6-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid (110mg). LC/MS Rt=3.88 [MH+] 442.3, 444.3.

b) A mixture of 6-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid (110mg, 0.25mmol), benzenesulphonamide (58mg, 0.3mmol), 1-[3-(dimethylamino)propyl]-3-ethylcarbodiimide hydrochloride (58mg, 0.3mmol) and 4-dimethylaminopyridine (3mg, 0.025mmol) in 1:1 dichloromethane/tetrahydrofuran (4ml) was stirred at room temperature for 2 hours and more benzenesulphonamide (16mg, 0.1mmol), 1-[3-(dimethylamino)propyl]-3-ethylcarbodiimide hydrochloride (19mg, 0.1mmol)

and 4-dimethylaminopyridine (1mg) was added. After a further 2 hours the mixture was diluted with ether/water and the organic layer dried (magnesium sulphate), evaporated and purified by chromatography on silica eluting with ethyl acetate/iso-hexane to give a white solid (85mg).

^{1}H NMR ($CDCl_3$) δ 2.07-2.14 (2H, m), 2.84-2.88 (2H, m), 2.98-3.01 (2H, m), 5.04 (2H, s), 6.74-6.79 (2H, m), 6.99 (1H, d), 7.06 (1H, d), 7.16-7.32 (3H, m), 7.54 (2H, t), 7.63 (2H, q), 7.81 (1H, d), 8.08-8.10 (2H, m), 9.55 (1H, s). LC/MS t=4.30, [MH+] 581.3, 583.3.

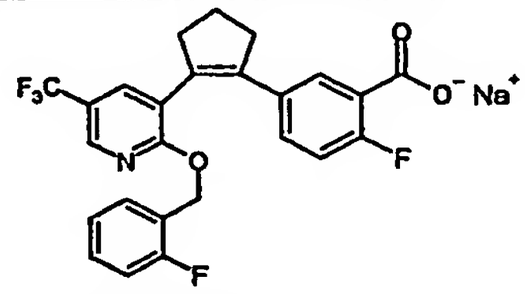
Example 343 6-[2-(5-bromo-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-N-(phenylsulfonyl)-2-pyridinecarboxamide



A mixture of 6-[2-(5-bromo-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid (110mg, 0.23 mmol), benzenesulphonamide(45mg, 0.29 mmol), 1-[3-(dimethylamino)propyl]-3-ethylcarbodiimide hydrochloride (55mg, 0.29mmol), and 4-dimethylaminopyridine (5mg) in 1:1 dichloromethane/tetrahydrofuran (5ml) was stirred at RT for 24 hours. The reaction mixture was diluted with diethyl ether (25ml) and washed with saturated sodium bicarbonate solution, water and brine.The organic phase was separated, dried and evaporated. Chromatography of the residue eluting with 1:9 ethyl acetate/hexane gave the title compound as a colourless solid (52mg).

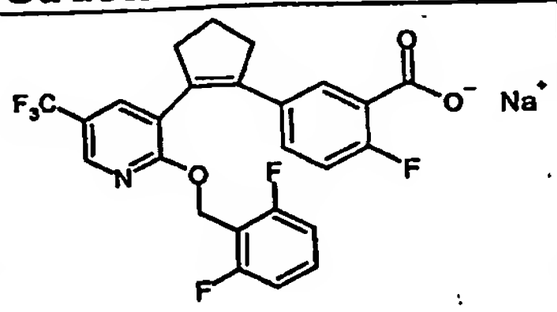
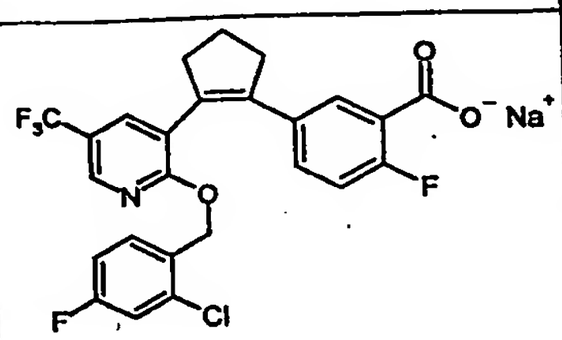
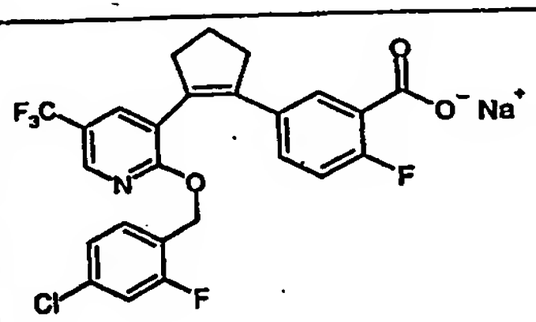
LC/MS: Rt = 4.33 min. [M+H] = 625, 627.

Example 344 2-Fluoro-5-(2-{2-[(2-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt

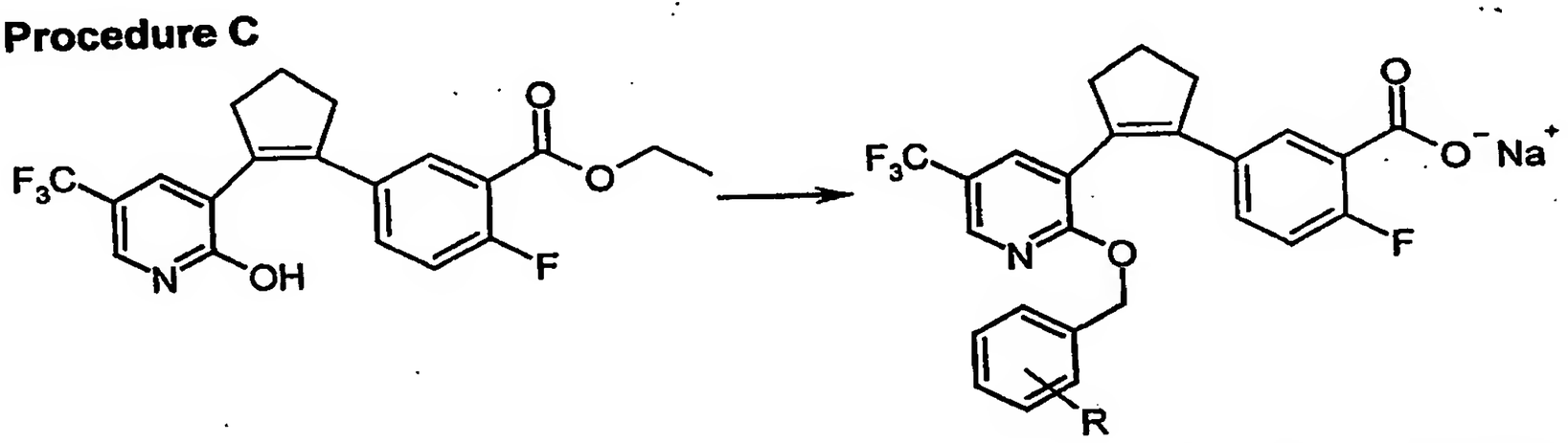


The corresponding ethyl ester was dissolved in ethanol (1ml) and 2M aqueous sodium hydroxide (1ml) was added. The mixture was heated to 120°C, by microwave, for 3mins. The reaction mixture was concentrated *in vacuo*, and the residue partitioned between ethyl acetate and water. The organic extract was dried (Na_2SO_4) and concentrated *in vacuo* to give the title compound as the sodium salt. LC/MS Rt=4.07min [MH^+] 477.

The following compounds were prepared as their sodium salts by the same method, starting from the appropriate ethyl esters.

Example	Structure	COMPOUND NAME	LCMS
345		5-(2-{2-[(2,6-Difluorophenyl) methoxy]-5-(trifluoromethyl) pyridin-3-yl}cyclopent-1-en-1-yl)-2-fluorobenzoic acid, sodium salt	Rt= 4.03min $[MH^+]$ 495
346		5-(2-{2-[(2-Chloro-4-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-2-fluorobenzoic acid, sodium salt	Rt= 4.25min $[MH^+]$ 512
347		5-(2-{2-[(4-Chloro-2-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-2-fluorobenzoic acid, sodium salt	Rt= 4.22min $[MH^+]$ 512

General Procedure C

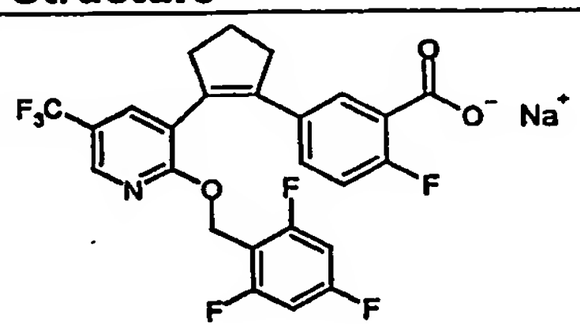
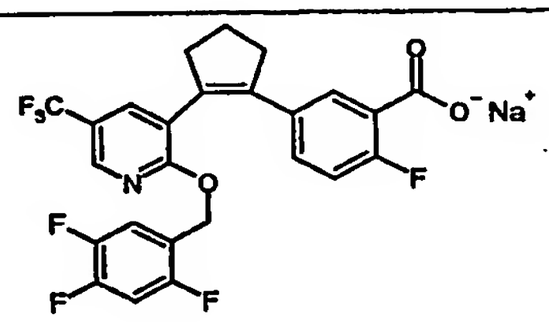
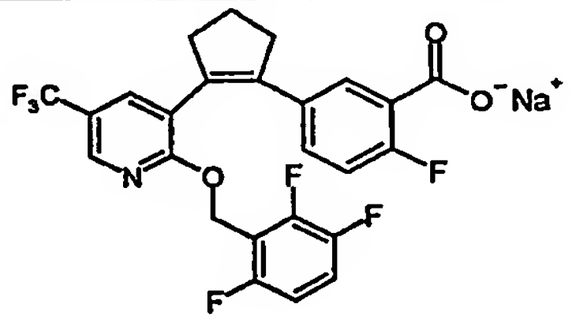
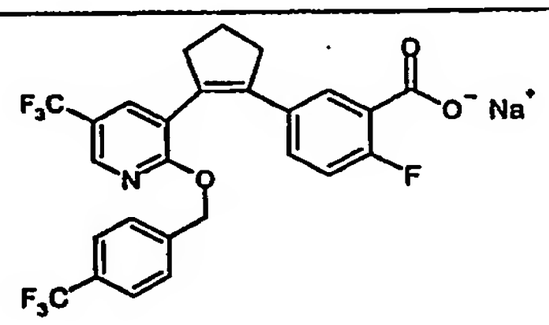


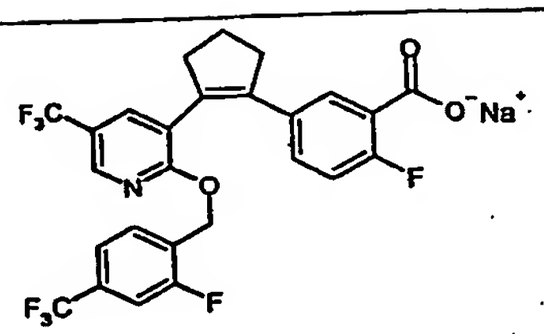
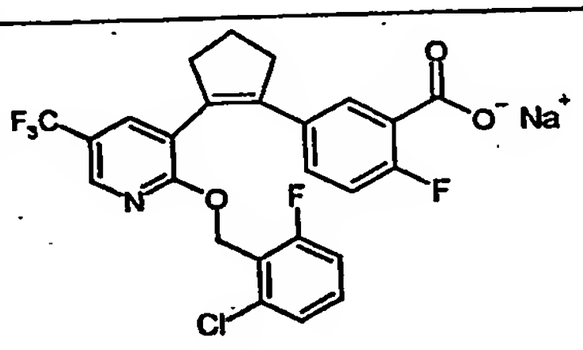
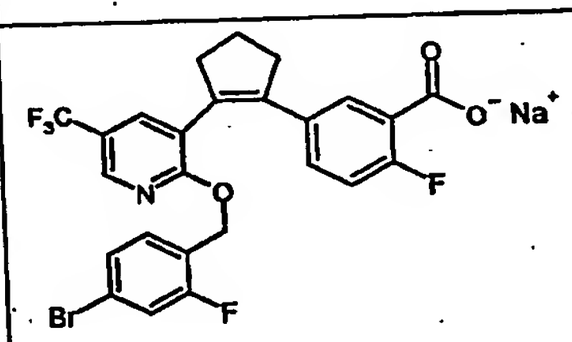
Ethyl 2-fluoro-5-{2-[2-hydroxy-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate (250mg, 0.63mmol) was dissolved in toluene (3ml), together with silver carbonate (192mg, 0.70mmol) and a substituted benzyl bromide (1.1equiv.). The mixture was heated to reflux for 4 hours, then concentrated *in vacuo*, and the product taken on without further purification.

Each residue was dissolved in a mixture of ethanol (2ml) and 2N aqueous sodium hydroxide (2ml), and this mixture was heated to 120°C, by microwave, for 3mins. The reaction mixture was filtered and concentrated *in vacuo*. The residue was dissolved in dichloromethane and treated with acetic acid, and then again concentrated *in vacuo*. The resulting material was purified using a basic solid phase extraction cartridge (Isolute® Flash NH2), loading the crude material as a methanol solution, and eluting with 10% aqueous HCl in methanol. The resulting acids were redissolved in dichloromethane and

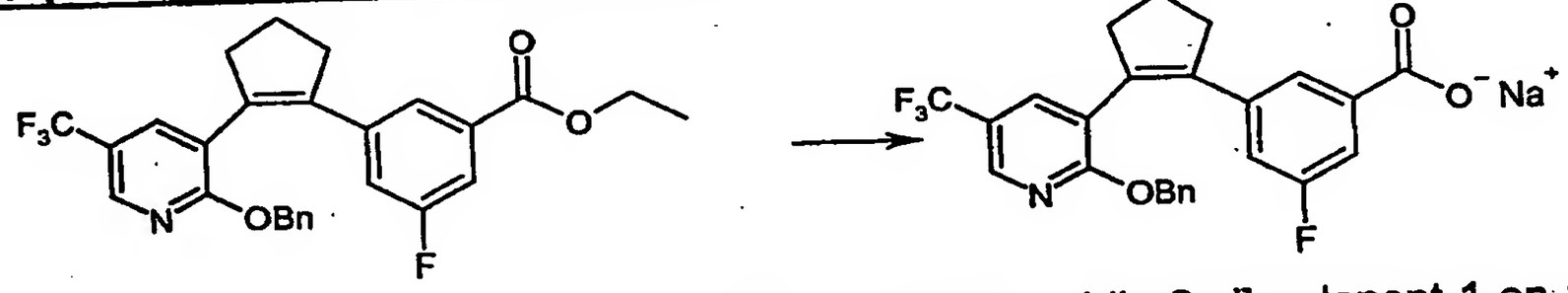
treated with aqueous 2N sodium hydroxide. The layers were separated, and the organic layer was concentrated *in vacuo*. The resulting sodium salt was redissolved in dioxane, which was removed by freeze-drying to give the product (sodium salt) as a solid.

The following compounds were prepared by General Procedure C:

Examples	Structure	Compound Name	LCMS
348		2-Fluoro-5-(2-{5-(trifluoromethyl)-2-[(2,4,6-trifluorophenyl)methoxy] pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 4.07min [MH$^+$] 512
349		2-Fluoro-5-(2-{5-(trifluoromethyl)-2-[(2,4,5-trifluorophenyl)methoxy] pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 4.09min [MH$^+$] 512
350		2-Fluoro-5-(2-{5-(trifluoromethyl)-2-[(2,3,6-trifluorophenyl)methoxy] pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 4.11min [MH$^+$] 512
351		2-Fluoro-5-[2-(5-(trifluoromethyl)-2-{[4-(trifluoromethyl)phenyl] methoxy}pyridin-3-yl)cyclopent-1-en-1-yl]-benzoic acid, sodium salt	Rt= 4.19min [MH$^+$] 526

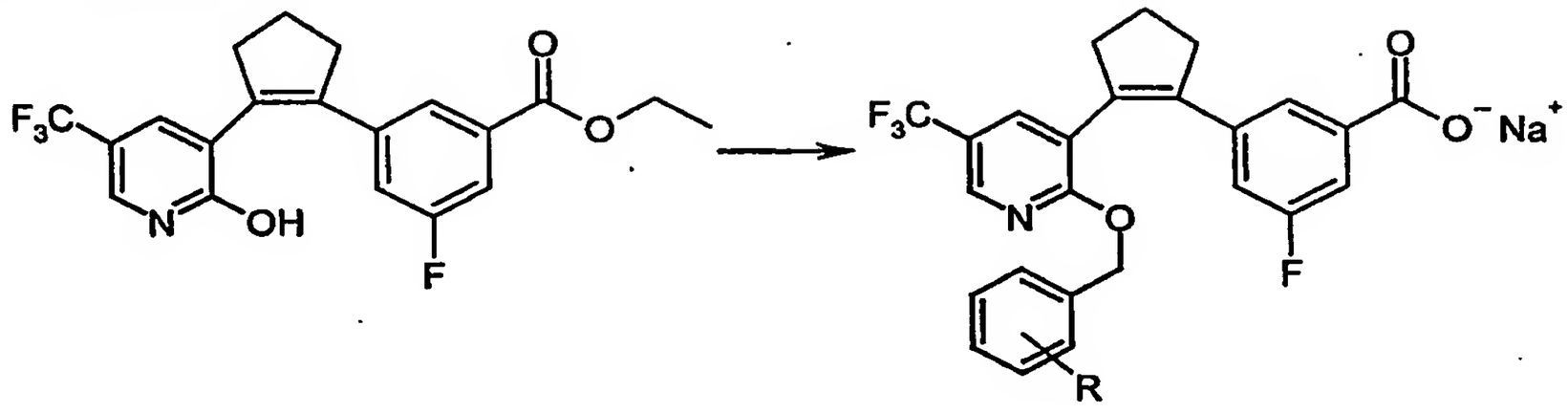
352		2-Fluoro-5-[2-(2-{[2-fluoro-4-(trifluoromethyl)phenyl]methoxy}-5-[trifluoromethyl]pyridin-3-yl)cyclopent-1-en-1-yl]-benzoic acid, sodium salt	Rt= 4.28min [MH$^+$] 544
353		5-(2-{2-[(2-Chloro-6-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-2-fluorobenzoic acid, sodium salt	Rt= 4.16min [MH$^+$] 510
354		5-(2-{2-[(4-Bromo-2-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-2-fluorobenzoic acid, sodium salt	Rt= 4.28min [MH$^+$] 554,556

Example 355 3-Fluoro-5-{2-[2-(phenylmethoxy)-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoic acid, sodium salt



Ethyl 2-fluoro-5-{2-[2-(phenylmethoxy)-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate (150mg, 0.31mmol) was dissolved in ethanol (2ml) and 2M sodium hydroxide (1.0ml) was added. The mixture was heated to reflux for 1 hour, by which time TLC analysis indicated that the reaction was complete. The cooled reaction mixture was diluted with water, acidified to pH5 with acetic acid, and then extracted with diethyl ether (x2). The combined organic extracts were washed with water, dried (Na_2SO_4) and concentrated *in vacuo* to give the crude acid, which was further purified by HPLC. The acid was treated with 2M aqueous sodium hydroxide, and this mixture extracted with dichloromethane. The organic extracts were concentrated *in vacuo* to give the title compound as the sodium salt.
LC/MS Rt=4.22min [MH$^+$] 458.
^{1}H NMR (MeOD) δ: 2.06-2.14(2H, m), 2.86-2.97(4H, m), 5.31(2H, s), 6.93(1H, ddd), 7.17-7.21(2H, m), 7.24-7.30(3H, m), 7.43(1H, ddd), 7.51(1H, t), 7.68(1H, d), 8.38(1H,dd).

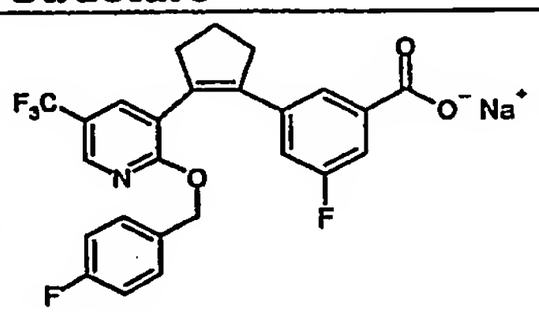
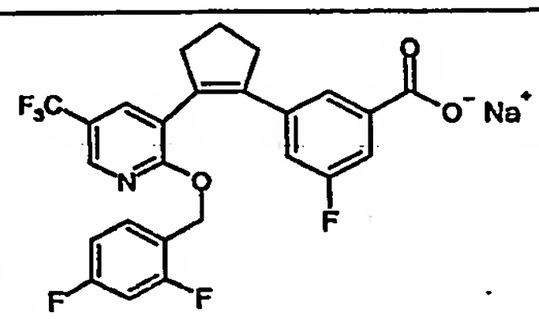
General Procedure D

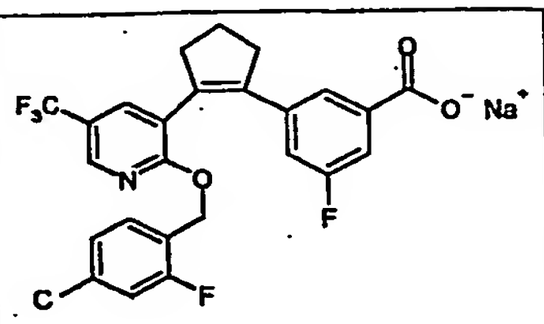
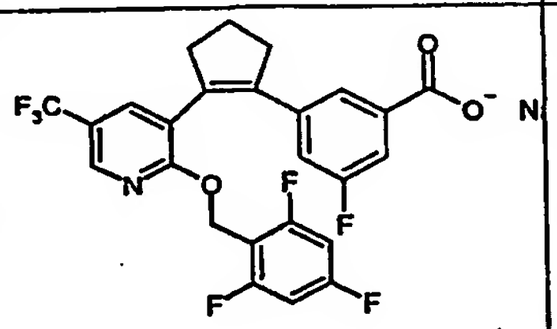
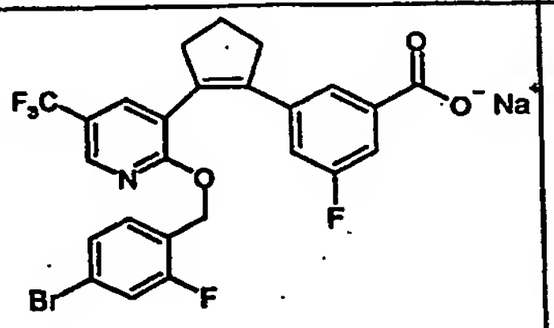


Ethyl 3-fluoro-5-{2-[2-hydroxy-5-(trifluoromethyl)pyridin-3-yl]cyclopent-1-en-1-yl}benzoate (250mg, 0.63mmol) was dissolved in toluene (3ml), together with silver carbonate (192mg, 0.70mmol) and a substituted benzyl bromide (1.1equiv.). The mixture was heated to reflux for 4 hours, then concentrated *in vacuo*, and the product taken on without further purification.

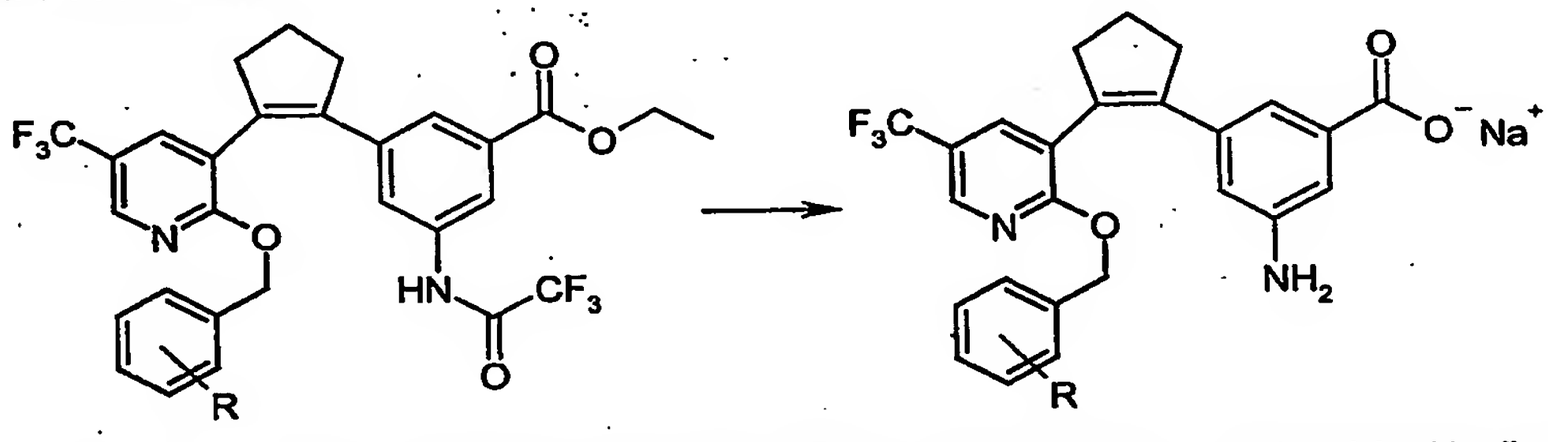
Each residue was dissolved in a mixture of ethanol (2ml) and 2N aqueous sodium hydroxide (2ml), and this mixture was heated to 120°C, by microwave, for 3mins. The reaction mixture was filtered and concentrated *in vacuo*. The residue was dissolved in dichloromethane and treated with acetic acid, and then again concentrated *in vacuo*. The resulting material was purified using a basic solid phase extraction cartridge (Isolute® Flash NH2), loading the crude material as a methanol solution, and eluting with 10% aqueous HCl in methanol. The resulting acid was redissolved in dichloromethane and treated with aqueous 2N sodium hydroxide. The layers were separated, and the organic layer was concentrated *in vacuo*. This was followed by further purification by HPLC. The pure acid was treated with 2M aqueous sodium hydroxide, and the mixture extracted with dichloromethane. The organic extracts were concentrated *in vacuo* to give the title compound as the sodium salt.

The following Examples were prepared by General Procedure D:

Example	Structure	Compound Name	LCMS
356		3-Fluoro-5-(2-{2-[(4-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 4.15min [MH+] 476
357		5-(2-{2-[(2,4-Difluorophenyl) methoxy]-5-(trifluoromethyl) pyridin-3-yl}cyclopent-1-en-1-yl)-3-fluorobenzoic acid, sodium salt	Rt= 4.17min [MH+] 494

358		5-(2-{2-[(4-Chloro-2-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-3-fluorobenzoic acid, sodium salt	Rt= 4.31min [MH^+] 510
359		3-Fluoro-5-(2-{5-(trifluoromethyl)-2-[(2,4,6-trifluorophenyl)methoxy] pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 4.12 min [MH^+] 512
360		5-(2-{2-[(4-Bromo-2-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-3-fluorobenzoic acid, sodium salt	Rt= 4.40min [MH^+] 554, 556

General Procedure E



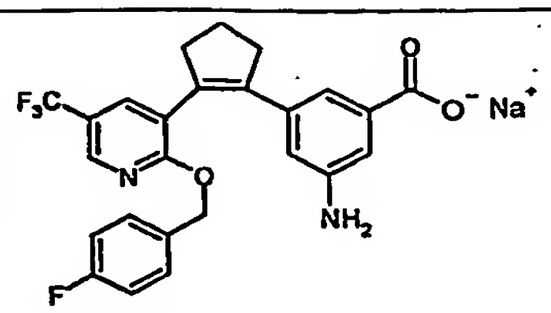
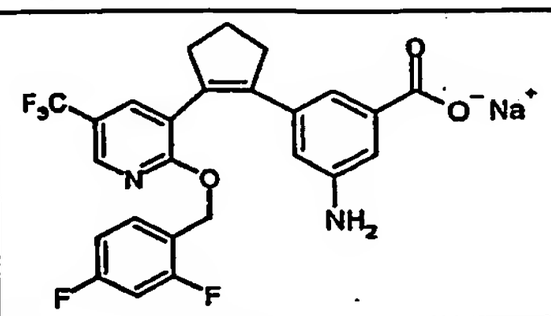
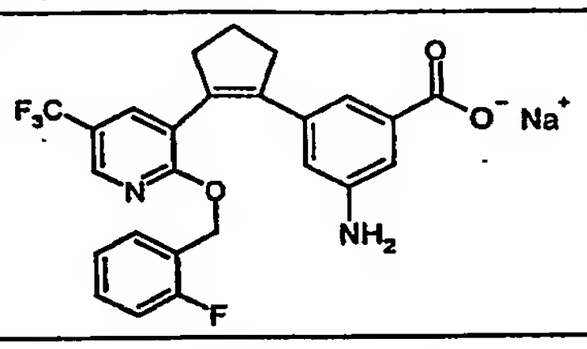
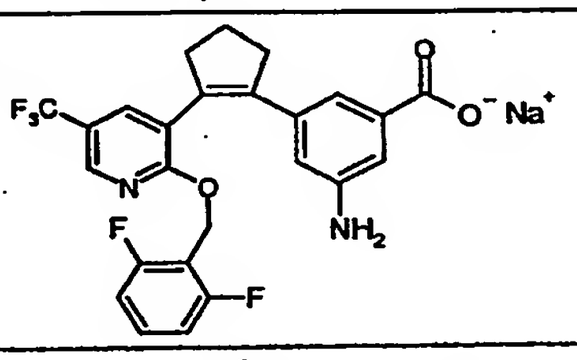
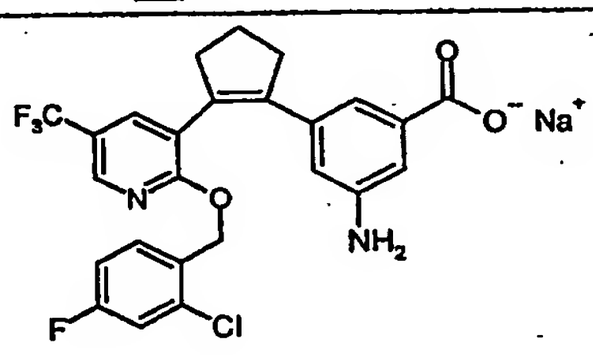
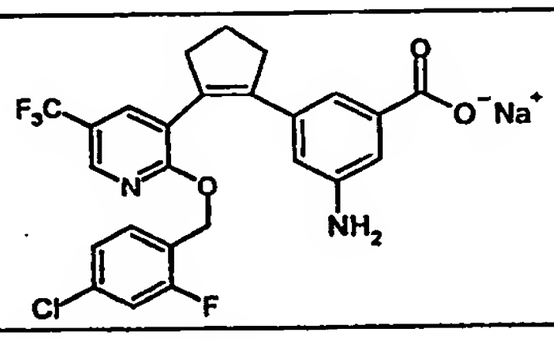
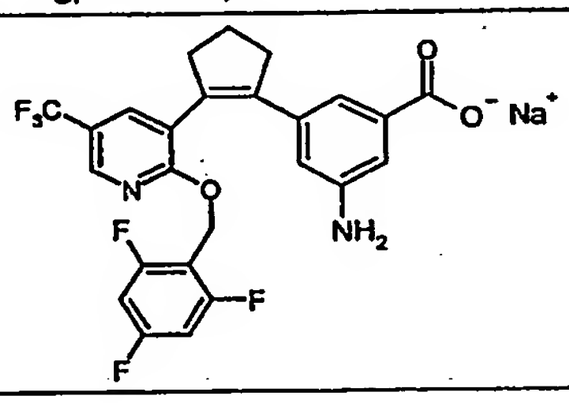
The ester was dissolved in ethanol (2ml) and 2M aqueous sodium hydroxide (1ml) was added. The mixture was heated to reflux for 2 hours. The reaction mixture was concentrated *in vacuo*, and treated according to procedure A or B.

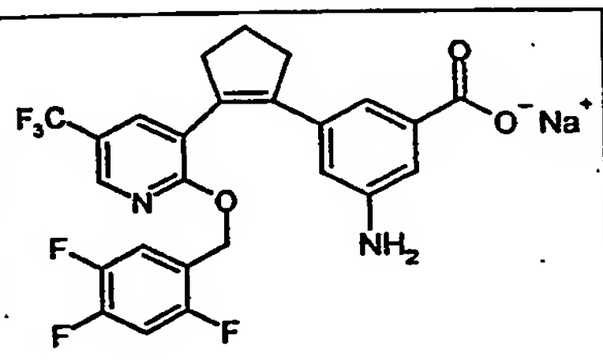
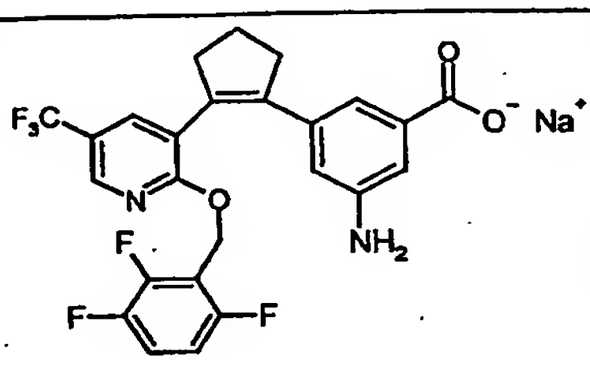
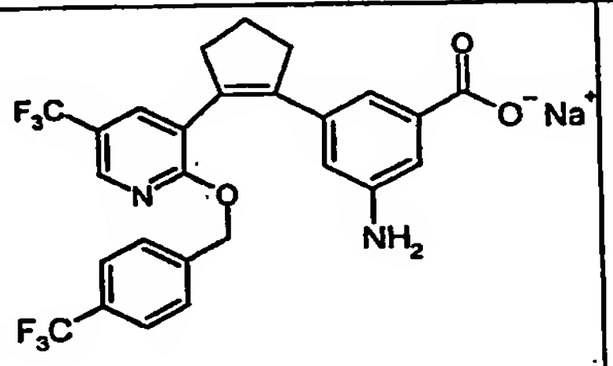
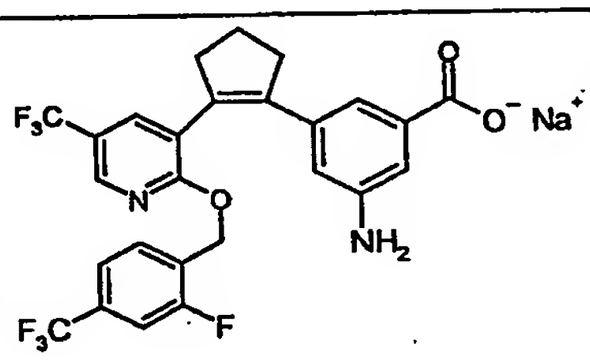
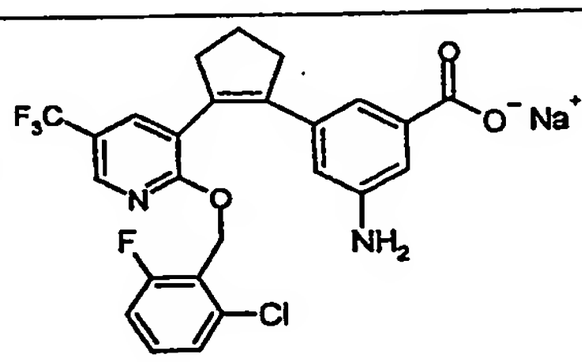
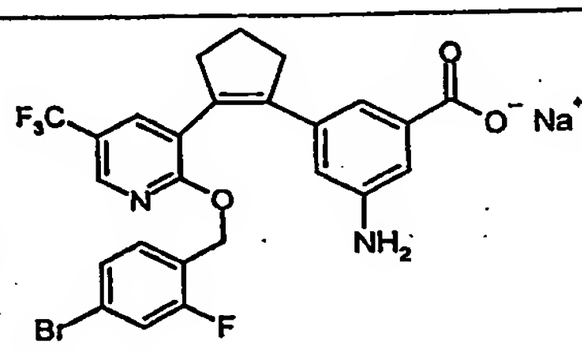
Procedure A: The residue was triturated with aqueous sodium hydroxide to give the sodium salt as a solid, which was collected by filtration and washed with water.

Procedure B: The residue was partitioned between ethyl acetate and water. The organic layer was dried (Na_2SO_4), and concentrated *in vacuo*, to give the sodium salt as a glassy solid.

The following Examples were prepared as their sodium salts by General Procedure E, starting from the appropriate ethyl esters

Example	Structure	Compound Name	LCMS

361		3-Amino-5-(2-{2-[(4-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 3.80min [MH^+] 473
362		3-Amino-5-(2-{2-[(2,4-difluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 3.84min [MH^+] 491
363		3-Amino-5-(2-{2-[(2-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 3.80min [MH^+] 473
364		3-Amino-5-(2-{2-[(2,6-difluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 3.77min [MH^+] 491
365		3-Amino-5-(2-{2-[(2-chloro-4-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 3.98min [MH^+] 507
366		3-Amino-5-(2-{2-[(4-chloro-2-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 3.98min [MH^+] 507
367		3-Amino-5-(2-{5-(trifluoromethyl)-2-[(2,4,6-trifluorophenyl)methoxy]-pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 3.84min [MH^+] 509

368		3-Amino-5-(2-{5-(trifluoromethyl)-2-[(2,4,5-trifluorophenyl)methoxy]-pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 3.87min [MH$^+$] 509
369		3-Amino-5-(2-{5-(trifluoromethyl)-2-[(2,3,6-trifluorophenyl)methoxy]-pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 3.85min [MH$^+$] 509
370		3-Amino-5-[2-(5-{trifluoromethyl}-2-{[4-(trifluoromethyl)phenyl]methoxy}-pyridin-3-yl)cyclopent-1-en-1-yl]-benzoic acid, sodium salt	Rt= 4.01min [MH$^+$] 523
371		3-Amino-5-[2-(2-{[2-fluoro-4-(trifluoromethyl) phenyl]methoxy}-5-{trifluoromethyl}pyridin-3-yl)cyclopent-1-en-1-yl]-benzoic acid, sodium salt	Rt= 4.01min [MH$^+$] 541
372		3-Amino-5-(2-{2-[(2-chloro-6-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 3.89min [MH$^+$] 507
373		3-Amino-5-(2-{2-[(4-bromo-2-fluorophenyl)methoxy]-5-(trifluoromethyl)pyridin-3-yl}cyclopent-1-en-1-yl)-benzoic acid, sodium salt	Rt= 4.03min [MH$^+$] 551, 553

It is to be understood that the present invention covers all combinations of particular and preferred subgroups described herein above.

ASSAYS FOR DETERMINING BIOLOGICAL ACTIVITY

The compounds of formula (I) can be tested using the following assays to demonstrate their prostanoid antagonist or agonist activity in vitro and in vivo and their selectivity. The prostaglandin receptors investigated are DP, EP_1, EP_2, EP_3, EP_4, FP, IP and TP.

The ability of compounds to antagonise EP_1 & EP_3 receptors may be demonstrated using a functional calcium mobilisation assay. Briefly, the antagonist properties of compounds are assessed by their ability to inhibit the mobilisation of intracellular calcium ($[Ca^{2+}]_i$) in response to activation of EP_1 or EP_3 receptors by the natural agonist hormone prostaglandin E_2 (PGE_2). Increasing concentrations of antagonist reduce the amount of calcium that a given concentration of PGE_2 can mobilise. The net effect is to displace the PGE_2 concentration-effect curve to higher concentrations of PGE_2. The amount of calcium produced is assessed using a calcium-sensitive fluorescent dye such as Fluo-3, AM and a suitable instrument such as a Fluorimetric Imaging Plate Reader (FLIPR). Increasing amounts of $[Ca^{2+}]_i$ produced by receptor activation increase the amount of fluorescence produced by the dye and give rise to an increasing signal. The signal may be detected using the FLIPR instrument and the data generated may be analysed with suitable curve-fitting software.

The human EP_1 or EP_3 calcium mobilisation assay (hereafter referred to as 'the calcium assay') utilises Chinese hamster ovary-K1 (CHO-K1) cells into which a stable vector containing either EP_1 or EP_3 cDNA has previously been transfected. Cells are cultured in suitable flasks containing culture medium such as DMEM:F-12 supplemented with 10% v/v foetal calf serum, 2mM L-glutamine, 0.25mg/ml geneticin and 10µg/ml puromycin.

For assay, cells are harvested using a proprietary reagent that dislodges cells such as Versene. Cells are re-suspended in a suitable quantity of fresh culture media for introduction into a 384-well plate. Following incubation for 24 hours at 37°C the culture media is replaced with a medium containing fluo-3 and the detergent pluronic acid, and a further incubation takes place. Concentrations of compounds are then added to the plate in order to construct concentration-effect curves. This may be performed on the FLIPR in order to assess the agonist properties of the compounds. Concentrations of PGE_2 are then added to the plate in order to assess the antagonist properties of the compounds.

The data so generated may be analysed by means of a computerised curve-fitting routine. The concentration of compound that elicits a half-maximal inhibition of the calcium mobilisation induced by PGE_2 (pIC_{50}) may then be estimated.

Binding Assay for the Human Prostanoid EP_1 Receptor

Competition assay using [^{3}H]-PGE2.

Compound potencies are determined using a radioligand binding assay. In this assay compound potencies are determined from their ability to compete with tritiated prostaglandin E_2 ([^{3}H]-PGE_2) for binding to the human EP_1 receptor.

This assay utilises Chinese hamster ovary-K1 (CHO-K1) cells into which a stable vector containing the EP_1 cDNA has previously been transfected. Cells are cultured in suitable flasks containing culture medium such as DMEM:F-12 supplemented with 10% v/v foetal calf serum, 2mM L-glutamine, 0.25mg/ml geneticin, 10µg/ml puromycin and 10µM indomethacin.

Cells are detached from the culture flasks by incubation in calcium and magnesium free phosphate buffered saline containing 1 mM disodium ethylenediaminetetraacetic acid (Na_2EDTA) and 10µM indomethacin for 5 min. The cells are isolated by centrifugation at 250xg for 5mins and suspended in an ice cold buffer such as 50 mM Tris, 1mM Na_2EDTA, 140mM NaCl, 10µM indomethacin (pH 7.4). The cells are homogenised using a Polytron tissue disrupter (2x10s burst at full setting), centrifuged at 48,000xg for 20mins and the pellet containing the membrane fraction is washed three times by suspension and centrifugation at 48,000xg for 20mins. The final membrane pellet is suspended in an assay buffer such as 10mM 2-[N-morpholino]ethanesulphonic acid, 1mM Na_2EDTA, 10mM $MgCl_2$ (pH 6). Aliquots are frozen at –80°C until required.

For the binding assay the cell membranes, competing compounds and [^{3}H]-PGE_2 (3nM final assay concentration) are incubated in a final volume of 100µl for 30 min at 30°C. All reagents are prepared in assay buffer. Reactions are terminated by rapid vacuum filtration over GF/B filters using a Brandell cell harvester. The filters are washed with ice cold assay buffer, dried and the radioactivity retained on the filters is measured by liquid scintillation counting in Packard TopCount scintillation counter.

The data are analysed using non linear curve fitting techniques (GraphPad Prism 3) to determine the concentration of compound producing 50% inhibition of specific binding (IC_{50}).

By application of these techniques, compounds of the examples had an antagonist pIC_{50} value of between 7.0 and 9.5 at EP_1 receptors and pIC50 value of < 6.0 at EP_3 receptors.

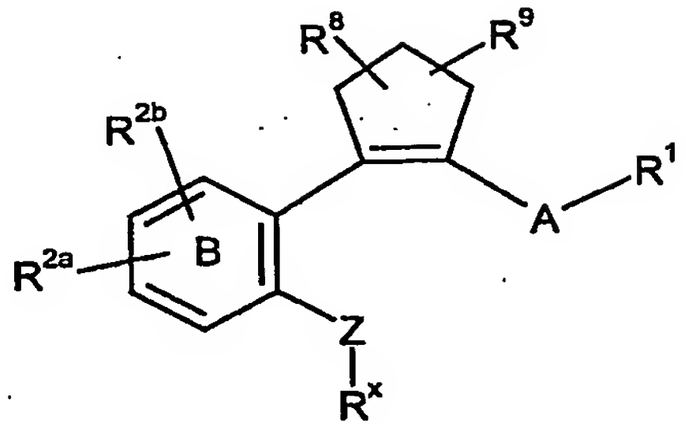
No toxicological effects are indicated/expected when a compound (of the invention) is administered in the above mentioned dosage range.

The application of which this description and claims forms part may be used as a basis for priority in respect of any subsequent application. The claims of such subsequent application may be directed to any feature or combination of features described herein.

They may take the form of product, composition, process, or use claims and may include, by way of example and without limitation the following claims:

CLAIMS

1. A compound of formula (I):



(I)

wherein:
A represents an optionally substituted aryl, or an optionally substituted 5- or 6- membered heterocyclyl ring, or an optionally substituted bicyclic heterocyclyl group;
B represents a phenyl or pyridyl ring;
Z represents O, S, SO, or SO_2;
R^1 represents CO_2H, CN, $CONR^5R^6$, CH_2CO_2H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted SO_2alkyl, $SO_2NR^5R^6$, $NR^5CONR^5R^6$, COalkyl, 2H-tetrazol-5-yl-methyl, optionally substituted bicyclic heterocycle or optionally substituted heterocyclyl;
R^{2a} and R^{2b} independently represents hydrogen, halo, optionally substituted alkyl, optionally substituted alkoxy, CN, SO_2alkyl, SR^5, NO_2, optionally substituted aryl, $CONR^5R^6$ or optionally substituted heteroaryl;
R^x represents optionally substituted alkyl wherein 1 or 2 of the non-terminal carbon atoms are optionally replaced by a group independently selected from NR^4, O and SO_n, wherein n is 0, 1 or 2: or R^x represents optionally substituted alkenyl, optionally substituted CQ^aQ^b-heterocyclyl, optionally substituted CQ^aQ^b-bicyclic heterocyclyl or optionally substituted CQ^aQ^b-aryl;
R^4 represents hydrogen or an optionally substituted alkyl;
R^5 represents hydrogen or an optionally substituted alkyl;
R^6 represents hydrogen or optionally substituted alkyl, optionally substituted heteroaryl, optionally substituted SO_2aryl, optionally substituted SO_2alkyl, optionally substituted SO_2heteroaryl, CN, optionally substituted CQ^aQ^baryl, optionally substituted CQ^aQ^bheteroaryl or COR^7;
R^7 represents hydrogen, optionally substituted alkyl, optionally substituted heteroaryl or optionally substituted aryl;
R^8 and R^9 independently represent hydrogen, chloro, fluoro, CF_3, alkoxy or alkyl;
Q^a and Q^b are independently selected from hydrogen and CH_3;
wherein when A is a 6-membered ring the R^1 substituent and cyclopentene ring are attached to carbon atoms 1,2-, 1,3- or 1,4- relative to each other, and when A is a five-

membered ring or bicyclic heterocyclyl group the R^1 substituent and cyclopentene ring are attached to substitutable carbon atoms 1,2- or 1,3- relative to each other;
or derivatives thereof.